DAILY METAL REPORTER

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METALS

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In This Issue

STRATEGIC METAL SUPPLY ASSURED
By JOHN D. MORGAN, JR., Materials Division,
Office of Defense Mobilization

EUROPEAN ALUMINUM OUTLOOK
By BOARD OF DIRECTORS
Vereinigte Aluminium-Werke A.G., Germany

BRITISH METAL MARKETS
By L. H. TARRING
London, England

DOMESTIC METAL MARKET REVIEW

U. S. METAL IMPORT DUTIES

WASHINGTON REPORT

METAL STATISTICS

AUGUST
1954

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TABLE OF CONTENTS

Washington Report 5

Strategic Metals Available for U. S. Emergency 7
By JOHN D. MORGAN, JR., Materials Division, Office of Defense Mobilization

1954 European Aluminum Outlook Bright 9
By BOARD OF DIRECTORS, Vereinigte Aluminium-Werke A.G., Germany

British Metal Markets 11
By L. H. TARRING, London, England

U. S. Metal Import Duties 14

Domestic Metal Market Review 15

Metal Statistics 20

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TWO LINE *Editorials*

One atom-bomb scientist predicts a terrible new bomb which will be seven times more powerful than the H-bomb, which is said to be powerful enough to destroy civilization. But is it really necessary to destroy civilization seven times?

* * *

A scientist reports the discovery of a glow-worm with a green light. That's not a glow-worm; it's a go-worm.

* * *

Astronomers state that most of the stars are receding from the earth at speeds up to 15,000 miles a second. Those young men who are planning experiments in space travel had better get busy before their destinations get too far away.

* * *

Don't worry too much because some of our members of Congress and other officials seem to be wasting so much time. Think of the mischief they might be doing if they were on the job.

* * *

Some people are beginning to suspect that Mr. Adlai Stevenson, if properly coaxed, might be persuaded to accept the Democratic nomination for President in 1956.

* * *

A British army official says that modern soldiers are "ruined by the malignant influence of mothers." Mothers, however, still seem to be indispensable in providing the personnel for the armies.

* * *

President Eisenhower says he is in favor of fair play in Congressional hearings. So far as can be learned, nobody has yet taken a bold stand in favor of unfair play.

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Washington Report

August 12, 1954.

THE GOVERNMENT again entered the open market to purchase lead and zinc for the national stockpile. It appeared that Government purchases were being made on a regular basis. Informed quarters anticipate that the General Services Administration, which does the actual buying for the Government's stockpiling program, will continue to make purchases of both metals for the rest of the year and into 1955.

The GSA on three successive months — June, July and August — made purchases of lead and zinc at the current market price. In August, trade quarters estimated the GSA purchased 8,500 tons of lead and about 15,000 tons of zinc. July's purchases by the agency were believed to have run about 10,000 tons for lead and 15,000 tons for zinc. In June, it was estimated the GSA purchased around 8,000 tons of lead and 12,000 tons of zinc for the stockpile. It was apparent that the most recent purchases by the GSA, at least in the case of zinc, prevented a further boost in producers' stocks of the metal. Consequently, as long as the GSA continues to buy zinc for the stockpile, no further deterioration in the statistical picture for this metal is contemplated. The August purchases by the GSA, as in the previous two months, stipulated that the lead and zinc be of domestic origin and produced subsequent to April 1.

Lead, Zinc Import Duties

Prsident Eisenhower's decision to delay action on lead and zinc import duties was not welcomed by the lead and zinc mining industry. The zinc trade was quite disappointed that the President put off such action, particularly since the Tariff Commission had recommended that the import taxes on both metals be increased. The lead market was unaffected by the delay. About the only people who welcomed the lack of action were importers.

But the domestic mining industry was encouraged when the President boosted the import tariff on watches, especially since he based his decision upon national defense. An important factor in the zinc industry asserted that while the White House had delayed a decision on zinc and lead tariffs, "the President's decision relative to watches lends hope that he may speedily come to the rescue of the mining industry, recognizing its supreme importance to the national defense of the country in any future emergency."

Meanwhile, the National Lead and Zinc Committee continued to urge President Eisenhower to take "prompt and constructive action" on the metals to provide relief for the domestic lead and zinc industry. The Committee has petitioned for relief under the "escape clause" of the Reciprocal Trade Agreements Act.

U. S. Foreign Metal Fund

The Senate made news of interest to the metal industry when it overrode Administration objections on July 30 and voted 49-40 to ban research and development abroad on important minerals as part of the U. S. foreign aid program. The action came on an amendment by Senator Malone (Rep., Nev.) to knock out of the $3,100,000,000 foreign aid authorization bill a section authorizing the overseas research program on metals needed for the U. S. stockpile.

Sen. Malone charged that the program, which he termed an "international WPA," would only serve to further cripple the American mining industry.

Chilean Copper Institute

Concerning the world scene, the copper industry was particularly interested in developments in Chile. If a decision reached by the Finance Committee of the Chamber of Deputies is approved by the Chilean Congress, control over the sale of Chilean copper will be taken away from the Central Bank of Chile and lodged with a "State Copper Institute." In spite of the fact that the Popular Socialist party in Chile favors the formation of a "Copper Corporation" that would do the selling of all the Chilean output, thereby depriving the Chile Copper Corp. and the Andes Mining Co., which are Anaconda subsidiaries, and Braden Copper Co., the Kennecott subsidiary, of all rights to market their copper, it is believed in Chilean Government circles that the Copper Institute plan will be the one approved by the Chilean Congress. If approved, the Institute most likely would begin functioning by mid-September.

Informed quarters in Santiago believed the Copper Institute would be empowered to supervise the sale of the metal by Anaconda and Kennecott. The Copper Institute would also be charged with formulating production policies for the American companies operating in Chile, its decisions being based on its study of world market conditions.

Metal Allocations Cut

Back in Washington, the Office of Defense Mobilization reduced allotments of copper, aluminum and steel for defense requirements in the fourth quarter of 1954. The copper allotments are 15 per cent lower than for the third quarter of this year, aluminum allotments are 7 per cent lower, and steel allotments for "A" products are 12 per cent lower.

Allotments for the fourth quarter, with third quarter allotments in parentheses, follow: copper and copper brass alloys, 72,006,604 pounds (85,055,033 pounds); aluminum, 106,728,834 pounds (114,557,665 pounds), and steel, 651,270 short tons (742,271 short tons).

ODM said the reductions in requirements from the third quarter resulted primarily from a general tapering off of the military production program, particularly the aircraft, ammunition and tank automotive programs.

Reduce Aluminum Set-Aside

The Business and Defense Services Administration, Commerce Department, announced that 127,000,000 pounds of aluminum will be set aside from the total supply available in the fourth quarter of 1954 to fill Department of Defense and Atomic Energy Commission requirements, and for defense related "B" products, foil and ingot for powder. This reserve is 7,000,000 pounds less than the amount set aside for similar orders in the third quarter of this year.

BDSA said the reduction reflects a

(Continued on page 13)

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Defense Production Act Commitments, New Long-Term Stockpiling Policy, Fast Tax Write-Offs Chief Factors in Increasing Stocks

By JOHN D. MORGAN, Jr., Materials Division, Office of Defense Mobilization

(Concluded from last month)

MATERIALS allocations, conservation orders, priority orders, price controls, shipping permits and similar controls will undoubtedly be required in the case of a future war in order to effectively channel productive resources to the most essential programs. However, the complexities and confusions resulting from detailed controls on metals and minerals are expected to be minimized in a future war period.

Turning now from the situation that would exist in the event of war in the near future, purchasing agents can look forward to adequate supplies of metals and minerals in the event that current conditions continue. Much of the expansion sponsored under the authority of the Defense Production Act, the accelerated tax amortization, and other defense programs will continue, and much of this production will be available for industrial use in the event that there are no major defense requirements. For example, to assure the expansion of metals and minerals production many Government contracts took the form of guaranteed floor price contracts by which the Government guaranteed to take specified quantities of materials at certain prices if they could not be sold elsewhere. Thus if there are large industrial requirements for aluminum, copper, tungsten, chrome and many other materials, it is expected that little will be sold directly to the Government, but rather the expanded supplies will be sold directly to industry.

Adequate Supplies In Future

In addition to specific expansion fostered by Government financial assistance of various types, there are many other reasons why purchasing agents can look forward to adequate supplies of metals and minerals in the future. New scientific and engineering principles are being applied to every phase of finding and extracting metals and minerals. Advanced geological, geophysical, and geochemical techniques are resulting in the discovery of ore bodies which formerly would have passed unnoticed. In geochemistry, for example, microchemical analyses of the metallic content of certain stream waters has pointed to the presence upstream of veins of certain metals.

Use Of Magnetometer

The airborne magnetometer had been developed in World War II to detect enemy submarines. It measures and records changes in the normal earth's magnetic field while being towed behind an airplane. The airborne magnetometer is currently being used to discover possible ore deposits in many areas where mere surface geologic indications would be inadequate or, due to the terrain, impossible to explore by conventional methods.

In the field of geology discoveries in other fields of science are now being actively applied to the identification of geologic formations. For example, measurement of the decay-time of certain radioactive materials can give valuable information on the age of certain mineral deposits and thus facilitate correlation of geologic data in one area with data from another area.

Mechanization Reduces Costs

In the mining industry the introduction of mechanization has greatly reduced costs in the cutting, breaking, and loading of materials underground. In many operations declines in the number of workers employed have been counterbalanced by increases in productivity per miner. The use of such machines as the mechanical loader, the under-cutter, the shuttle car, and belt and chain conveyors has spread from coal mining to underground mines working other deposits such as salt, limestone, and potash. Major mining machine companies are now working on combination cutter-loaders that will attack a solid face of mineral, break it down, and load it out onto attached conveyors in a continuous operation. In surface operations the trend has been toward the use of more and larger mechanical equipment. Large draglines and shovels strip the overburden from mineral deposits and then dig out the ore, while war-time developments in off-the-road diesel-powered rubber-tired scrapers, haulage units, and trucks have resulted in significant reductions in the ton-mile cost of moving ore. All of these improvements in many cases more than offset the increased costs that would normally be expected to result from the declining grade of many ores.

Mineral Extraction

In mineral preparation and extraction it has been possible to treat larger tonnages of materials with ever smaller percentages of metal or mineral content. For example, 20 years ago copper ores being mined averaged about 2 per cent in copper content, whereas today some of the large copper mines treat ores containing only slightly more than ½ of 1 per cent of copper. Thus only about ten pounds of copper, selling in its final refined form for only about 30 cents per pound is recovered from 2,000 pounds of rock. This rock must be mined under ground, then transferred to the surface, crushed to a very fine size, concentrated by combined chemical and physical means, smelted, and finally electrolitically refined and the final product sold at a profit. Normally we would think of our annual domestic production of about 100 millions tons of iron ore as an outstanding mining effort, but the figures just cited in the case of copper ore will readily indicate that probably over 100 million tons of copper ore must be mined

Address delivered at 39th annual international convention of National Association of Purchasing Agents, Chicago, Ill., May 26, 1954. The opinions are those of the author and do not necessarily reflect official views.

annually to provide the 800 thousand tons of domestic copper metal that is produced.

Developments in synthetic minerals are reducing or eliminating the needs for many naturally occurring minerals. For example, synthetic aluminum oxide is replacing corundum from Africa. Domestic mullite is replacing kyanite from India. Chemically pure manganese dioxide is replacing battery grade manganese ores from the Gold Coast of Africa. Built-up insulating material made from small bits of mica in many applications is replacing natural mica sheets which commonly are produced in India and in Brazil. Pressed domestic talc can be used in place of block steatite talc. Domestic natural or synthetic graphite can be used in making crucibles in the place of natural graphite obtained from Madagascar. The Bureau of Mines of the Department of the Interior, university research laboratories, and private industry, are all engaged in research intended to find substitutes for scarce materials and new uses for common and abundant minerals.

More Economical Use

In the field of metal use, the application of scientific and engineering principles is resulting in better and more economical ways of utilizing metals and minerals. For example, metal cladding processes make it possible to bond a layer of metal that is highly corrosion resistant to a much heavier but less corrosion resistant layer, the whole then having sufficient strength to be used in high-pressure, high-corrosive applications. Improved designs and fabricating techniques can eliminate the need for considerable metal by reducing waste in forming and finishing. For example, building various assemblies through welding eliminates the need for much cutting and shaping, while the application of powder metallurgy is resulting in the saving of many machining operations as well as almost eliminating scrap losses.

Ultrasonic, electrolytic, and electrosparking devices are replacing industrial diamonds as cuttings tools. Special heating can be done by induction and high frequency currents, and mixtures of various compressed gases, to facilitate the shaping of metal parts. Welding techniques, including the utilization of inert atmospheres provided by helium or argon, are facilitating the joining of metals.

New Techniques

Research by industry, scientific institutions, and government laboratories is greatly extending our knowledge of the characteristics that can be obtained by new combinations of metals in the form of new alloys. At the same time, new techniques are developing metals of very great purity which are found to have remarkably different properties than the normal metals with which we are familiar. For example, it has been found that the life of certain electronic tubes operating at high temperatures and high vacuum can be greatly lengthened by utilizing very pure nickel in the internal electrodes and thus avoiding the introduction of contaminents normally present in micro quantities in the metal produced by regular means.

From the facts and trends presented here it should be obvious to the members of the National Association of Purchasing Agents that there is little possibility that the United States will be seriously handicapped by depletion of deposits of metals and minerals. The Government has made major provisions for supplying defense needs in times of national emergency, and U. S. industry-utilizing science and technology, holds the key to better utilization of minerals. From time to time in the future there may be serious shortages of a few materials, particularly in connection with new weapons programs of the armed forces, but to the degree that such shortages can be foreseen, steps will be taken in advance to alleviate or to eliminate them, by a proper combination of expansions of supply and redesign of the items involved.

Larger Reserves Developed

Widely publicized estimates of U. S. reserves of metals and minerals must be taken with more than a little grain of salt. If the U. S. petroleum reserve estimates that were developed twenty-five years ago had been correct we would have run out of oil and gasoline years ago. Instead we are now using more each year and have moreover developed larger reserves. And, should liquid petroleum reserves decline some time in the distant future it will be economically feasible to effect a gradual transition to oil shales or hydrogenated coals as sources of liquid hydrocarbons. The crust of the earth and the waters of the sea have barely been touched by man's utilization of the minerals contained therein. We have thus far only concentrated on the highest-grade mineral deposits, which generally outcropped on the surface and made discovery relatively easy. Combinations of high temperatures and high pressures with electrical energy, to say nothing of nuclear energy, will provide better tools for breaking down and conveniently reassembling the mineral molecules and atoms in the earth's crust and in the sea. Rising standards of living in the United States and in many foreign countries will increase man's utilization of metals and minerals but as long as man's mind and ingenuity remain unshackled, free of coercive political and economic forces, we shall always have adequate supplies of metals and minerals to meet our needs.

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European Demand Brisk, Prospects Bright; Water Power, Fuel Reserves Give American Producers Distinct Advantage Over Continental Smelters

By BOARD OF DIRECTORS, Vereinigte Aluminium-Werke, A. G., Germany

WORLD production of crude aluminum during 1953 reached the record level of approximately 2.5m. metric tons, compared with approximately 2m. metric tons in 1952, and more than quadrupled 1938 production figures. This rapid advance, and the changes in the relative position of the various continents as producers, are reflected in the following figures:

	1938		1953	
	in 1,000 metric tons and %			
Western Europe	320	(54.2)	450	(18.2)
incl. W. Ger.	(160)	(27.1)	(107)	(4.3)
U.S. & Canada	190	(32.2)	1,630	(66.0)
Rest of World*	80	(13.6)	390	(15.8)
	590	(100%)	2.470	(100%)

* Estimated.

This remarkable progress may be attributed to the outstanding chemical and physical properties of aluminum and its alloys, as well as to its cheapness, compared with other metals.

Europe's Declining Output

An analysis of the reasons for Europe's falling share in the world production immediately touches upon the main problems facing the aluminum industry: a steady flow of raw materials, electricity supplies, the capital market, and the expansion of consumption.

There being no world shortage of bauxite, the supply of raw materials seems assured, even though the cost of extraction varies, provided political interference does not choke the natural flow of goods. Since aluminum smelting consumes a disproportionately large amount of fuel, America holds a distinct advantage over continental European producers, as its plentiful water power and its large fuel reserves appreciably affect production costs.

Advantage Further Enhanced

This advantage is further enhanced by the more favorable situation on the U. S. capital market. The working capital of an aluminum smelting plant, with processing installations and power plant, is not turned over even once during the year. Any difference in interest rates is, therefore, bound to be clearly reflected in costs.

In the long run, with world production steadily rising, every aluminum producer will have to face the question of how to stimulate consumption. In Europe particularly, where restrictions on civilian use have been in force since before the war, there is a fair chance of aluminum being used for a variety of purposes in a number of fresh fields.

Production

Production of crude aluminum in Western Germany during 1953 amounted to 107,000 tons, as against 100,000 tons in the previous year. 73,000 tons were produced by this Company's plants alone, working at 90 per cent capacity — a slightly more favorable percentage than that maintained the year before.

Part of the aluminum smelting works at Erft has now been reequipped. This addition to the plant available raises smelting capacity to some 95,000 tons. Against this, potential production capacity in the whole of Western Germany may be put at 140,000 tons. The refining plant for the production of pure aluminum is being extended at present, since the special properties of this highly refined metal have created a strong demand.

Sales

Production in 1953 was fully taken up. The relatively high export figure of 23,000 tons of crude aluminum was due to slackening demand on the home market during the first six months. Sales increased but very slightly during that period, as the

Report of Board of Directors at annual general meeting of Vereinigte Aluminium-Werke A. G., Berlin-Bonn, Germany, on May 24, 1954. Board members include: Dr. Ludger Westrick, chairman (on leave); Theodore Dirksen, Dr. Hans Ginsberg, Dr. Karl Rohrs, and Dr. Josef Schulte.

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manufacturing industry was not working to full capacity; imports for the year totaled 13,000 tons. Since the middle of 1953, however, demand on the home market has risen most satisfactorily.

Nevertheless, consumption of crude aluminum per head of the population in Western Germany falls short of that in other highly industrialized countries, even though total consumption was raised from 43,000 tons to 105,000 tons between 1950 and 1953.

Main Task

The main task of aluminum producers and manufacturers during the next few years will be to raise aluminum consumption in Western Germany to the level reached in other countries. In close cooperation they have already succeeded during the last few years, in extending, or even introducing, the use of aluminum in a number of industries, such as mining, transport, building, and the manufacture of packaging materials and containers. Among more recent developments has been the introduction of aluminum casings for cables, after special manufacturing problems had been solved.

The volume of semi-finished aluminum goods expanded satisfactorily. During the last six months of 1953, average monthly sales amounted to 9,600 tons, as against 7,700 tons during the first half of the year, and 7,400 tons in 1952. As plants were still working under capacity, the development of prices became the subject of complaints. Exports could be maintained, however, in spite of serious price difficulties.

Foundries Increase Turnover

Light metal foundries managed to increase their turnover. Light metal castings in Western Germany, during the last six months of 1953, reached a monthly average of 4,200 tons as against 3,600 tons during the whole of 1952.

Prices

With a German home market price of DM 2.23 per kilo free delivered for ordinary crude aluminuum, the actual return per kilo is no more than DM 2.15. Price reductions last year caused net yields to drop by about 10 per cent compared with 1952. The corresponding price in the United States where aluminum consumption per head of the population is highest at about 7 kilos, is no more than DM 1.99 per kilo. The American producers however, with higher costs than those borne by either the Canadian or the Norwegian aluminum industry, can claim an advantage of DM 0.40 per kilo in electricity costs alone. Prices in countries with similar conditions are on the same level as German prices, or even higher. It should be emphasized in this connection, however, that these countries levy considerably higher import duties.

Scrap Aluminum

Utilization and sale of scrap aluminum were on a limited scale. The sale of alumina and coal by-products continued normally. It was also possible to restore long-standing business relations with the Otavi Mines and Railways Company for the production and sale of vanadium, with satisfactory results. Market conditions for ferro-alloys, however, proved difficult. Considerable imports, coupled with a fall in steel production, caused so decisive a decline in prices as to force a number of German firms out of business. Production capacity for ferro-silicon could be utilized to a limited extent only.

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Tin Prices Dip on Cease Fire in Indo-China But No Serious Recession Expected; Consumer Demand Quieter for Lead, Zinc

August 6, 1954

By L. H. TARRING
London, England

FROM a price point of view, an easier tone has characterized the London copper market during the past month which may be attributed to two factors: a good deal of Chilean copper bought here some time ago has recently been arriving and has been hedged on the London market, and this has had the effect of bringing down the cash price and reducing the backwardation. The other feature, of course, is that trading interest is normally rather slack at this time of the year which, in England at any rate, is the peak holiday season when many consuming works are closed down.

Some people take the view that as world supplies of copper are gradually growing, the statistical position of the metal will show a gradual easing and that sooner or later this may have its effect on prices but, on the other side of the picture, it has to be reported that the prospects for consumption in this country over the remainder of the year seem to be quite bright.

European Consumption Good

The offtake of the fabricators, apart from any possible slowing down during the holiday season, gives every indication of being fully maintained at the satisfactory levels established in recent months and, as far as can be judged, consumption on the Continent of Europe is also running at a good rate.

Apart from the pricing contracts which were made recently for Chilean copper, mostly via America, it has become known here just recently that one of the biggest U. K. copper consumers—I. C. I. Ltd.—has contracted to take something in the region of 12,000 tons of Braden fire refined copper over a period of about 18 months, payment being made in transferable account sterling.

Whether recent moves in Chile towards the supplanting of the Chilean Central Bank as the sole seller of Chilean copper by a Copper Institute or Copper Corporation, which might be even more completely a Government organization, will delay further, or prevent, the sale of Chilean copper through its former normal marketing channels has still to be seen, but recently there has been a tendency—at any rate as far as Braden is concerned — for more of it to be sold in this country through the regular channels.

A threatened strike at the Mufulira mine in Rhodesia was fortunately averted, but it is clear that the major question of resolving the difficulties between European and native unions and the Rhodesian producing companies on the question of the advancement of native workers, is still largely unresolved.

Cease-Fire Depresses Tin

As might have been expected, the satisfactory conclusion of the negotiations for a cease fire in Indo-China had a somewhat depressing effect on tin prices, although the movement was not really very pronounced.

This is due to the fact that so long as the American Government continues to take substantial tonnages of tin off the market there is little

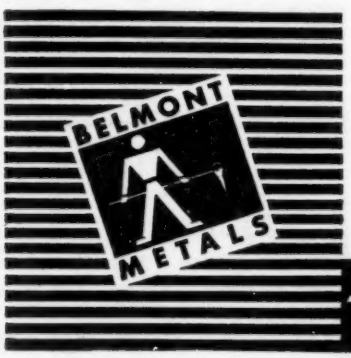
U. K. COPPER STATISTICS

The British Bureau of Non-Ferrous Metal Statistics reports U. K. stocks of copper at the end of May as 65,314 tons (60,118 tons end April) comprising 16,866 tons of blister (14,617 tons) and 48,448 tons refined (45,501 tons). Of the total stocks, consumers held 20,994 tons of refined, stocks in L. M. E. warehouses, 118 tons blister and 1,465 tons refined, and other stocks 16,748 tons blister and 25,989 tons refined.

Production in May of primary refined was 10,420 tons (11,865 tons) and that of secondary blister 853 tons and secondary refined 7,272 tons (927 tons and 6,065 tons respectively in April.)

Consumption during May was higher at 47,298 tons compared with 42,480 tons in April. The following figures show consumption by main trades, in long tons:

UNALLOYED COPPER PRODUCTS	May 1954	—Jan.-May— 1953	1954
Wire	14,638	63,067	69,499
Rods, Bars & Sections	1,281	5,270	5,833
Sheet, Strip and Plate	4,788	17,028	23,759
Tubes	4,055	16,026	18,273
Castings and Misc.	500	2,500	2,500
ALLOYED COPPER PRODUCTS			
Wire	1,075	3,522	5,010
Rods, Bars & Sections	6,614	22,788	32,643
Sheet, Strip and Plate	7,767	30,504	34,521
Tubes	1,207	5,382	5,285
Castings and Misc.	4,163	15,612	21,112
Copper Sulphate	1,210	5,717	5,519
Total all Products	47,298	187,416	223,954
of which:			
Consumption of refined			
(a) Virgin	36,238	(97,674)	171,111
(b) Secondary		(34,246)	
Consumption of copper and alloy scrap (copper content)	11,060	55,496	52,843



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prospect of any real surplus of supplies developing, and with the expectation that the International Tin Agreement will be duly ratified and become operative, people are not looking for any serious recession in values.

Consuming demand is naturally somewhat quieter during this peak holiday season, but it is believed to be purely a temporary phase and fundamentally little change in the rate of consumption is looked for.

Tinplate Trade Active

The tinplate trade continues to be very active and the outlet for tin in alloys is, on the whole, well maintained; but total consumption does not seem to grow very much. An interesting development is the efforts that are being made by France to get support for her plea that the ceiling price under the tin agreement should be reduced from £880 to £840 a ton and, according to the present reports, she is receiving some support from the British, Belgian and Dutch Governments and a reluctant agreement from some of the Malayan Chinese producers. This may at a later stage be a matter of some importance, assuming that it is formally accepted by the International Tin Council later in the year, but for the time being it has not very much effect on the market position.

At the annual meeting of the Consolidated Tin Smelters, Ltd., the chairman, Mr. Clifford Waite, protested vigorously against renewed references by Senator Johnson (in a letter to President Eisenhower, regarding the continuation of the Texas City smelter) to the "price gouging international tin combine." He further pointed out that the Bolivian mines would have no reason to close if the Texas City smelter ceased operations, as Senator Johnson claimed, recalling that the whole of the Bolivian production of concentrates was smelted in Europe before the erection of the American smelter in 1941 and could again be smelted here "on terms which would compare favorably with any plant not in receipt of a subsidy."

Lead Demand Quieter

The lead market here has not escaped the generally easier trend in prices during the past month, but the movement has not been one of great dimensions. Consumer demand is seasonally rather quieter at the present time, but there is every indication that over the remaining months of the year European demand will be maintained at much the same level as that which prevailed until quite recently.

The impression is developing, however, that the overall lead supply position is a little easier than it was and even though there may not be room for a fall in prices, sentiment here is not particularly bullish about this metal at the present time.

Await U. S. Duty Decision

The question of whether or not the U. S. import duties will be raised is one which continues to attract a great deal of attention on this side of the Atlantic as it is generally conceded that, although an increase in the U. S. import duty on lead might serve to maintain the domestic price, it would almost certainly have a depresssing effect on world quotations.

It is fairly obvious from the continuing appreciable backwardation in London Metal Exchange prices that although consumers are finding no difficulty in satisfying all their requirements of lead, the spot supply position here is still a long way from being top heavy.

Seasonal Letdown In Zinc

Zinc has suffered from the usual seasonal influences on consumption, but it is noticeable that sentiment with regard to zinc prices has become rather more pessimistic than with the other metals. This is due not to any falling off of a serious kind in European consumption but to the fact that world supplies of the metal seem to be definitely running rather ahead of industrial requirements.

Even after allowing for the expected purchases for the American stockpile, the statistical situation in the U. S. is looked at somewhat askance and it is probably true to say that at the moment there are few bulls of zinc over here and a number of potential bears.

Operators do not lose sight of the fact that prices have again dipped to a figure, below which many producers might find it very difficult to continue profitable operation, but so long as mine output of zinc is maintained at its present level and unless, or until, the United States' consumption rises, it is difficult to take a very encouraging view of price prospects.

The same factors operate in zinc as in lead with regard to the possibility of increased American import duties, namely, that if these are imposed they may tend to depress world prices.

U. K. LEAD STATISTICS

According to the British Bureau of Non-Ferrous Metal Statistics, U. K. stocks of lead at the end of May totaled 29,793 tons compared with 30,005 tons at the end of April and comprised 24,151 tons imported virgin and 5,642 tons English refined (24,230 tons and 5,775 tons respectively in April.) Stocks held by consumers were 16,732 tons imported virgin and 4,765 tons English refined (15,453 tons and 5,007 tons), while stocks held in L. M. E. warehouses amounted to 2,176 tons imported virgin (1,451 tons) and other stocks 5,243 tons imported virgin and 877 tons English refined (7,326 tons and 768 tons).

Production during May amounted to 6,477 tons of English refined compared with 6,125 tons the previous month. Consumption at 28,637 tons was higher as against 25,820 tons in April. The following figures show U. K. consumption by main trades, in long tons:

	May 1954	—Jan.-May— 1953	1954
Cable Making	7,209	44,071	33,968
Battery (excluding oxides)	2,691	11,558	13,030
Oxides and Compounds:			
Battery	2,563	9,533	11,952
Other Uses	3,481	12,082	16,353
White lead	1,045	4,079	4,827
Sheet and Pipe	6,710	27,103	31,489
Shot	441	1,783	2,111
Foil and Collapsible Tubes	369	1,231	1,704
Solder	1,022	4,084	5,259
All other alloys	1,249	4,524	6,051
Miscellaneous Uses	1,857	6,141	8,778
Total consumption	28,637	126,189	135,522
of which:			
Import. Virgin	16,814	61,722	78,236
English refined	6,207	28,820	26,421
Scrap including remelted	5,616	35,647	30,865

U. K. TIN STATISTICS

According to the British Bureau of Non-Ferrous Metal Statistics, U. K. stocks at the end of May were higher at 4,347 tons compared with 4,065 tons at the end of April. This was the highest figure since August 1952. Of the May figure consumers held 1,470 tons and other stocks 2,877 tons. Production in April (the latest figure available) amounted to 2,696 tons compared with 1,452 tons in March. Consumption was also higher at 1,732 tons compared with 1,702 tons the previous month. The following figures show consumption by main trades during May, in long tons.

	May 1954	—Jan.-May— 1953	1954
Tinplate	791	3,929	4,181
Tinning	133	529	630
Solder	162	580	890
Alloys	465	2,251	2,293
Wrought tin	80	229	335
Chemicals	89	242	367
Other Uses	12	41	61
Total all trades	1,732	7,801	8,757

U. K. ZINC STATISTICS

The British Bureau of Non-Ferrous Metal Statistics reports U. K. stocks of zinc at the end of May as 38,409 tons compared with 38,953 tons at the end of April. Of the May figure consumers held 20,435 tons and stocks in L. M. E. warehouses amounted to 1,680 tons. The estimated zinc content of zinc concentrates held totaled 33,801 tons (32,517 tons). Production during May of virgin metal amounted to 6,476 tons compared with 6,079 tons in April. Consumption at 27,551 tons was higher compared with the 26,084 tons in April. The following figures show U. K. consumption by main trades, in long tons:

	May 1954	—Jan.-May— 1953	1954
Brass	9,344	34,009	44,407
Galvanizing	9,230	35,220	44,324
of which:			
General	2,805	13,357	13,845
Sheet	3,060	9,999	14,806
Wire	1,874	6,215	8,774
Tube	1,491	5,649	6,899
Rolled Zinc	1,906	8,459	9,043
Zinc Oxide	2,512	9,151	13,218
Zinc Alloy Diecasting	2,857	9,172	14,136
Zinc Dust	694	3,586	3,443
Misc. Uses	1,008	4,798	4,966
Total all trades	27,551	104,395	133,537
of which:			
Primary metal	20,226	72,857	97,511
Secondary	7,325	31,538	36,026

Washington Report

(Continued from page 5)

decrease in military requirements. The fourth quarter figure represents 14 per cent of the anticipated supply of domestic and imported primary aluminum for that period. The third quarter, 1954 set-asides were 15 per cent of anticipated supply.

Mineral Depletion Allowance

Sen. Malone was just as effective in winning another round for the domestic mining industry, one which he had been conducting for months, when he knocked out authorization of U. S. funds for research and development abroad of important metals. The Senate finally passed on July 29 his amendment permitting a 23 per cent depletion allowance for 32 critical minerals. The bill, previously passed by the House, was sent to the President.

23% Deduction Permitted

Under the bill, the depletion allowance is permitted for lead, zinc, tungsten, uranium, manganese and 27 other minerals, some of which had hitherto been allowed only a token depletion allowance as low as 5 per cent. The effect of the depletion allowance is to permit the operator of a mine producing any of the metals a 23 per cent deduction in his annual net income.

GSA's Strategic Materials

Quantities bought through June 30, 1954, under the Government's purchase program for domestic tungsten, manganese, chrome, beryl, and columbium-tantalum were announced July 19 by Edward F. Mansure, Administrator of General Services. A partial breakdown reveals:

Purchase of 3,000,000 short ton units (20 pounds each) of contained tungsten was authorized, with delivery to date 985,295 short ton units. Authorized purchase of 37,000,000 long ton units (22.4 pounds each) of contained manganese. Authorized purchase of 200,000 long tons of chrome ores and concentrates, with 64,282 long tons delivered to date. Authorized purchase of 1,500 short tons of beryl, with 266 short tons, in terms of program, delivered to date. Delivery of columbium-tantalum to date, from both domestic and foreign sources, 4,666,271 pounds.

Titanium Expansion Goal

The Government set an expansion "goal" calling for construction of facilities to process 37,500 tons of titanium ingots a year by the end of 1956.

In setting the new "interim" goal, the Office of Defense Mobilization said it will issue rapid tax writeoff allowances to companies which build such capacity by the deadline date.

The ingot-processing operation is the third step in the production of titanium products. First a raw type called "sponge" is produced. This is then melted into ingots and these ingots are processed into mill products in the third step.

ODM earlier set up these goals for the first two steps, 25,000 tons of titanium sponge production capacity and 37,500 tons of annual titanium ingot melting capacity.

No Processing Facilities in U. S.

At the present time there are no processing facilities in the United States which have been specifically designed for production of titanium mill products, ODM said. Titanium users, therefore, have relied on stainless steel production facilities for the fabrication of titanium rod, sheet, bar, and other forms.

"It is expected that both improved quality and reduced cost will result from production facilities especially designed for the metal," ODM said. Agency officials predicted that increased use of titanium mill products over the next few years "will result in a corresponding increase in demand for timely and adequate titanium mill capacity."

All three of the goals are "interim" in character because a review now under way of U. S. material requirements in event of any future mobilization has not yet been completed. When the study is finished, ODM officials said firm new goals for processing facilities as well as sponge-making and ingot melting facilities will be established.

Test Titanium Process

Meanwhile, the Glidden Company, Cleveland, Ohio, plans to build a pilot plant at Sparrows Point, Md., to make titanium metal by a new electrolytic process. Adrian D. Joyce, Glidden chairman, said the company simultaneously will build at the same site a factory to produce titanium dioxide at the rate of 12,000 tons a year.

The two plants will cost about $12,000,000, Mr. Joyce said.

Perkins Named Director

The appointment of George Perkins, of Louisville, Ky., director of the products and applications department, Reynolds Metals Co., as director of the Aluminum-Magnesium Division of the Business and Defense Services Administration, was announced by BDSA Administrator Charles F. Honeywell.

Mr. Perkins, who is serving the Government on loan from his company and without compensation, succeeds Cylde M. Adams, who is returning to his position as secretary and director of the Bohn Aluminum and Brass Corp., Detroit Mich.

Amend Copper Order

In accordance with changed defense requirements the copper division of the Business and Defense Services Administration announced an amendment of BDSA Order M-11A which revises percentages of mill space requirements to be reserved for copper and copper-base alloy products commencing with October deliveries.

Amendment 5 to Order M-11A provides for decreases in required reservations of mill space on most categories of copper-controlled materials.

Mill Space Percentage

Percentages of mill space reserved under the amendment for unalloyed brass mill plate, sheet, strip and rolls are increased from 7 to 9; and rod, bar, shapes, and wire, from 7 to 12. The reserve for unalloyed seamless tube and pipe remains at 6 per cent of capacity.

Alloyed plate, sheet, strip and rolls set-asides for October and subsequent deliveries are decreased from 13 to 8 per cent; alloyed rods, bar, shapes, and wire, from 10 to 6 per cent; and alloyed seamless tube and pipe, from 26 to 17 per cent.

Mill space to be reserved under the amendment for all copper wire mill products is reduced from 13 to 8 per cent, and for copper foundry products and unalloyed copper powder mill products, from 13 to 7 per cent. These decreases are due mostly to adjustments made in computing "B" product portions of the space reserved for defense orders.

Reserved space for military ammunition cups and discs and for copper-base alloy powder mill products will be provided by means of production directives issued by the BDSA.

Scrap Metals Duty-Free

The Senate passed and sent to the White House, on August 12, a bill to continue until June 30, 1955, the suspension of import duties on most types of metal scrap. Lead scrap is not included in the bill and zinc scrap is included only if imported under the terms of a written contract entered into before July 1, 1954.

Imports off metal scrap for domestic use generally account for less than 2 per cent of total metal scrap consumption in the U. S. Copper scrap is not affected by the Senate's action since copper scrap already comes in duty-free under the terms of another bill.

United States Duties on Principal Ore and Metal Imports

(Including Revisions in Effect June 6, 1951, Under Torquay Agreements)

(Quantities Are in Pounds Unless Otherwise Stated; n.s.p.f. Stands for "Not Specially Provided For.")

COPPER

NOTE—The excise tax of 4c a pound on copper (which was reduced to 2c a pound by the Geneva Trade Agreement) was suspended in April, 1947, until March 31, 1949, and on expiration it was further suspended until June 30, 1950. The tax was reimposed on July 1, 1950. It was suspended again on May 22, 1951, retroactive to April 1, 1951, and until February 15, 1953, and again until June 30, 1954. Suspension further extended to June 30, 1955.

Copper ore and concentrates, usable as flux, etc., copper content	free
Copper ore and concentrates, product of Cuba and Philippines, copper content	free
Copper ore and concentrates, copper content	free
Regulus, black, or coarse copper, and cement copper, copper content	free
Unrefined black, blister, and converter copper in pigs or converter bars, copper content	free
Refined copper in ingots, plates or bars, copper content	free
Copper rolls, rods or sheets	1¼c lb.
Copper seamelss tubes and tubing	3½c lb.
Copper plain wire	12½%
Copper brazed tubes	5½c lb.
Old and scrap copper, fit only for remanufacture; and scale and clippings, copper content	free

BRASS

Brass rods, sheets, plates, bars, strips, muntz or yellow metal sheets, sheathing, bolts, piston rods, shafting and bronze rods, tubes and sheets	2c lb.
Brass tubes and tubing, seamless	2c lb.
Brass tubes, brazed, angles and channels	6c lb.
Brass and bronze wire	12½%

LEAD

NOTE—Import duties on lead-bearing ores, flue dust, and mattes of all kinds, lead bullion or base bullion, lead in pigs and bars, lead dross, reclaimed lead and antimonial lead were suspended Feb. 12, 1952, and reimposed on June 26, 1952. Lead scrap duty was reimposed July 1, 1952.

Lead-bearing ores and mattes, n. s. p. f., lead content	¾c lb.
Bullion or base bullion, lead content	1 1/16c lb.
Pigs and bars, lead content	1 1/16c lb.
Reclaimed, scrap, dross, lead content	1 1/16c lb.
Babbitt metal and solder, lead content	1 1/16c lb.
Pipe, sheet, shot, glaziers' lead, and wire	1 5/16c lb.
Type metal and antimonial lead, lead content	1 1/16c lb.
White lead	1.05c lb.
Litharge	1¼c lb.
Red lead	15/16c lb.
Orange mineral	1c lb.

ZINC

NOTE—Import duties on zinc-bearing ores, and on zinc in blocks, pigs and slabs were suspended Feb. 12, 1952, and reimposed on July 24, 1952. Tax on old zinc and dross and skimmings reimposed July 1, 1953.

Zinc-bearing ores, except pyrites containing not more than 3% zinc, zinc content	6/10c lb.
Zinc contained in zinc-bearing ores, n. e. s., not recoverable, zinc content	6/10c lb.
Zinc, old and worn out, fit only for remanufacture	¾c lb.
Dross and skimmings	¾c lb.
Zinc in blocks, pigs, or slabs	7/10c lb.
Zinc in sheets	1c lb.
Zinc sheets, plated with nickel or other base metal, or solutions	1⅛c lb.
Zinc dust	7/10c lb.
Zinc die-casting alloys	12½%
Zinc oxide and leaded zinc oxides containing not more than 25% lead, dry	3/5c lb.
ground in or mixed with oil or water	1c lb.

MISCELLANEOUS METALS AND ORES

Aluminum, metal and alloys, crude, except alloys elsewhere provided for	1½c lb.
Aluminum scrap	free
Aluminum plates, sheets, bars, rods, circles, squares, etc	3c lb.
Antimony ore, antimony content	free
Antimony metal and regulus	2c lb.
Antimony needle or liquidated	¼c lb.
Antimony oxide	1c lb.
Antimony sulphides	½c lb. & 12½%
Arsenic, metallic	3c lb.
Arsenious acid or white arsenic	free
Bauxite, crude	50c ton
Bauxite, refined	¼c lb.
Bismuth	1⅞%
Bismuth salts and compounds	35%
Beryllium metal and compounds	25%
Beryllium ore	free
Cadmium	3¾c lb.
Cadmium flue dust, cadmium content	free
Chrome ore or chromite	free
Cobalt ore and concentrates, cobalt content	free
Chrome or chromium metal	12½%
Cobalt metal	free
Magnesium, metallic	20c lb.
Magnesium scrap	free
Magnesium alloys, powder, sheets, wire	20c lb. & 10%
Manganese ores, containing over 10% manganese, manganese content	¼c lb., except Cuba, free
Molybdenum ore or concentrates, molybdenum content	35c lb.
Nickel ore, matte and oxide	free
Nickel and alloys, nickel chief value, n. s. p. f., in pigs, ingots, shot, cubes, grains, cathodes, or similar forms	1¼c lb.
Nickel, bars, rods, plates, sheets, castings, strips, wire or electrodes	12½%
Nickel tubes, tubing	6¼%
(if cold rolled, drawn or worked—2½% extra)	
Nickel scrap	free
Platinum, ores, platinum content, oz. troy	free
Platinum, grain, nuggets, sponge and scrap, oz. troy	free
Platinum in ingots, bars, sheets, or plates, not less than ⅛ in. thick, oz. troy	free
Quicksilver or mercury	25c lb.
Selenium and salts	free
Tantalum	12½%
Tin ore, cassiterite, and black oxide of tin, tin content	free
Tin in bars, blocks, pigs, grain, granulated, and scrap, and alloys, chief value tin, n. s. p. f.	free
Tungsten ore or concentrates, tungsten content	50c lb.

U. S. METALS FAIRLY STEADY DESPITE WEAKNESS IN LONDON MARKET; STOCKPILING AIDS LEAD AND ZINC

Primary Aluminum Prices Raised 1/2c to 7/10c a Lb.; Copper Demand Sustained; Texas Tin Smelter Again Operating; Quicksilver Tight

August 6, 1954

DOMESTIC metal market remained fairly steady during the month in review but price dips in London caused some concern here. Copper demand in this country has been sustained but lead and zinc have been quiet with Government stockpiling a factor in helping to maintain price levels. The only major metal to show a price change was aluminum, with pig advancing 0.50c a pound, and ingot 0.70c.

Fair-Sized Copper Orders

Copper consumers have been placing fair-sized orders in recent trading. In copper circles, there was general agreement that the advance in the aluminum price was helpful to copper in that it narrowed the price spread between the two metals. In discussing the use of the two metals the fact has been stressed frequently that because the price of aluminum is so much lower than that of copper, the latter is being substituted for the former.

In the domestic market, the easing of prices for the metal on the London Metal Exchange was generally attributed to selling pressure on the part of those dealers who had bought Chilean copper and who were forced to price it. At the same time, consumer interest in the U. K. was light due to reduced consumption because of vacation shutdowns.

The weakness in London, however, had no effect on the domestic copper market. The large producers in this country were virtually sold out as far as their August copper is concerned. Custom smelters, at this writing, were confident they would shortly dispose of all their August copper. The price for electrolytic copper remained firm at 30.00c a pound delivered.

The only change in the situation, as far as custom smelters were concerned, was that they were not reaching out for copper scrap. Two major refiners continued to take in No. 2 heavy copper and wire at 25.50c a pound. One important custom smelter was reported to have withdrawn from the market as a buyer of No. 2 copper scrap at 25.50c, but it did not appear that he had been successful in getting scrap at below this figure.

KENNECOTT'S COPPER OUTPUT AT COMPLETE STANDSTILL

Copper: Kennecott Copper Corp.'s production of copper in the U. S. as well as in Chile was at a complete standstill on Aug. 19 as the result of strikes, with output cut by about 45,000 tons a month. Anaconda Copper Mining Co. workers in Butte were scheduled to strike Aug. 23. Anaconda produces 6,000 to 7,000 tons of copper a month in Montana. As a result of the strike news, demand for copper spurted, with London quotations also rising. Custom smelters' copper scrap buying prices also moved up, with 25.75ca pound offered for No. 2 heavy copper and wire scrap.

Ingots: Several brass and bronze ingot makers on August 11 increased their selling prices by 0.50c to 1.50c a pound. The rise were said to reflect higher prices ingot makers have had to pay for scrap. At least one major ingot maker, however, failed to follow the market upward, so that a range prevailed for most grades.

Tin: Spot Straits tin was quoted at 92.62½c a pound in the New York market on August 19. Prompt Straits tin was at 93.00c.

Phelps Dodge Labor Pact

Branches of the Phelps Dodge Corp. at Bisbee, Douglass and Ajo, Ariz., and the AFL Metal Trades Councils, announced ratification by the AFL unions at these branches of an agreement reached July 23.

The Mine, Mill and Smelter Workers announced that union members voted by an 85 per cent majority in favor of strike action if necessary to win an adequate settlement in wage and contract bargaining. The union's nationwide strike vote was taken among the 100,000 members located in plants and mines of the Anaconda Copper Mining Co., American Smelting & Refining Co., Kennecott Copper Co., Phelps Dodge Copper Corp., American Brass Co. plants in Connecticut and New York, and other plants and mines.

Chilean Copper Institute

Domestic producers with mining properties in Chile were greatly interested in the possibility that Chile might establish a Copper Institute. The Institute would be empowered to supervise the sale of Chilean copper by Anaconda and Kennecott.

The Institute, however, besides supervising the sale of Chilean copper, would also be charged with formulating production policies for the American companies operating in Chile.

Expenses of the Institute would be borne by the copper producers.

Lead, Zinc for Stockpile

The General Services Administration on August 4 again asked producers of lead and zinc to submit offers, by noon of August 5, to supply metals for delivery to the national stockpile. Delivery of the metals must be completed by October 15, and the metal must be of domestic origin produced after April 1.

Most producers offered the GSA as much lead for the stockpile as they had done in July. The agency is believed to have purchased about 8,500 tons at the established price of 14 00c. New York.

Civilian consumer demand has been moderate.

Smelting Charge Holds

While several of the leading smelters were still taking in battery plates at the $50 a ton smelting charge, and were not being deluged with shipments, one important factor on August 3 boosted its smelting charge to $55 a ton. Under current price conditions the $55 fee was equivalent to being out of the market as a buyer.

Weakness on London Exchange

The weakness on the London Metal Exchange in lead and zinc reflected a number of factors according to domestic producers, including the Indo-China armistice and seasonally reduced consumption due to vacations.

The London Metal Exchange did not seem to be influenced by the British Board of Trade's ruling that will permit the export of lead from the U. K. to the Soviet bloc except China. Reports had been current for some time that foreign lead was finding its way behind the Iron Curtain, but such sales had been made surreptitiously. Since it will no longer be necessary to "bootleg" out of the U. K. lead that is destined for the Soviet bloc, it had been anticipated that the increased activity would

have had a firming tendency on the London market.

Zinc for Stockpile

Zinc producers were reported to have responded to the GSA request for tenders on August 5 by offering as much zinc to the stockpile as they had done in the previous month. It is believed that the GSA bought about 15,000 tons.

Marketwise, there was less activity than in recent trading. Most inquiries from consumers were for small lots for prompt shipment, with business done at the going price of 11.00c a pound East St. Louis for the Prime Western grade.

Special High Grade zinc of foreign origin was offered for sale in the domestic market at 11.75c a pound, c.i.f. New York, duty paid.

With the domestic price of Special High Grade at 12.50c a pound delivered, the foreign metal was being offered at 0.75c a pound less. To the 11.75c foreign price, however, must be added the transportation charges to the consuming plant as well as the broker's commissions, so that in the final analysis the differential between the domestic and foreign quotations was not very large.

Texas Tin Smelter Operating

The Government-owned tin smelter at Texas City, Texas, resumed operations on August 1. The smelter was out of production during July. In Washington, the Senate Banking Committee approved a House-passed measure to establish a joint Senate-House committee to study the advisability of maintaining on a permanet basis a domestic tin smelting industry. The joint committee would also go into the question of availability of supplies of tin to meet national defense needs.

In the New York market spot Straits tin was quoted at 93.00c a pound on August 9, compared with 96.75c on July 6. The high during the July 6-August 9 period was 97.875c, registered on July 16. The low for the period was 93.00c at the close of trading on August 9.

Aluminum Price Advanced

Aluminum Co. of America, Reynolds Metals and Kaiser Aluminum Chemical Co. all posted higher prices for primary aluminum. The price of 99 per cent minimum average aluminum pig was raised 0.50c, to 20.50c a pound, and 0.70c a pound for the 99 per cent plus ingot, to 22.20c.

Smelters quickly followed the advance in primary aluminum quotations, generally increasing prices for their secondary aluminum ingots by 0.50c a pound. Smelters also indicated that higher prices they have been paying for aluminum scrap contributed to the advance in secondary ingots.

Quicksilver Steady

Spot European quicksilver was steady at $290 per flask of 76 pounds. Supplies were tight but consumer demand was light. Forward European quicksilver, for August-September delivery, was being offered at a discount of $5 a flask.

Meanwhile, the National Bank of Commerce predicted, according to a report from Mexico City, that Mexican quicksilver producers would accept a U. S. proposal to buy 75,000 flasks of metal for the national stockpile, even though the price offered by the GSA was well below the world quotation. The GSA recently offered to pay $225 per flask. Bank officials said the contract would probably be signed because it has the advantage of guaranteeing the price of quicksilver to Mexican producers for the next two and a half years.

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STANDARD METAL DIRECTORY — The authoritative reference guide for the iron, steel and metals industries. Detailed reports on steel mills and foundries — Officers, capitalization, equipment, capacity, products, raw materials consumed.

WASTE TRADE DIRECTORY — Comprehensive in its classification of the waste materials industry, with lists of dealers, brokers, graders, packers, importers, exporters and consumers.

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WORLD TEXTILE DIRECTORY — An international index listing in three languages the importers and exporters of raw cotton, wools, silk, rayon, yarns, fibres, burlap, jute, flax, linen, textile wastes, piece goods, all textile manufacturers, etc.

NATIONAL BUSINESS PRESS **425 West 25th Street, New York 1, N. Y.**

Daily Metal Quotations in July, 1954

The following quotations are taken from the Daily Metal Reporter

(In Cents Per Pound)

July	Copper					Tin Straits New York		Lead		Zinc					Aluminum	Antimony	Silver
	Producers' Price Del. Conn.	Custom Smelters' or Outside Price	Electro f. o. b. Refinery	Lake Del.	Average Electrolytic Export Price f. a. s. N. Y.	Spot	Prompt	New York	Outside St. Louis	Prime West. f. o. b. E. St. Louis	Prime West. Del. N. Y.	Brass Spec. f. o. b. E. St. Louis	High Grade Delivered	Spec. High Grade Delivered	Virgin 99%	Domestic Spot 99.5% f.o.b. Laredo	(Cents Per Ounce) New York
1	30.00	30.00	29.70	30.00	30.00	96.50	96.50	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
2	30.00	30.00	29.70	30.00	30.00	96.375	96.375	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
3	30.00	30.00	29.70	30.00	30.00	....	....	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	....
6	30.00	30.00	29.70	30.00	30.00	96.75	96.75	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
7	30.00	30.00	29.70	30.00	30.00	96.50	96.50	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
8	30.00	30.00	29.70	30.00	30.00	96.375	96.375	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
9	30.00	30.00	29.70	30.00	30.00	96.50	96.50	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
10	30.00	30.00	29.70	30.00	30.00	....	....	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	....
12	30.00	30.00	29.70	30.00	30.00	96.50	96.50	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
13	30.00	30.00	29.70	30.00	30.00	96.50	96.50	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
14	30.00	30.00	29.70	30.00	30.00	96.75	96.75	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
15	30.00	30.00	29.70	30.00	30.00	97.25	97.25	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
16	30.00	30.00	29.70	30.00	30.00	97.875	97.875	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
17	30.00	30.00	29.70	30.00	30.00	....	....	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	....
19	30.00	30.00	29.70	30.00	30.00	97.75	97.75	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
20	30.00	30.00	29.70	30.00	30.00	96.75	96.75	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
21	30.00	30.00	29.70	30.00	30.00	95.50	95.50	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
22	30.00	30.00	29.70	30.00	30.00	95.75	95.75	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
23	30.00	30.00	29.70	30.00	30.00	96.75	96.75	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
24	30.00	30.00	29.70	30.00	30.00	....	....	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	....
26	30.00	30.00	29.70	30.00	30.00	97.00	97.00	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
27	30.00	30.00	29.70	30.00	30.00	96.125	96.125	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
28	30.00	30.00	29.70	30.00	30.00	96.125	96.125	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
29	30.00	30.00	29.70	30.00	30.00	96.00	96.00	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
30	30.00	30.00	29.70	30.00	30.00	95.875	95.875	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	85.25
31	30.00	30.00	29.70	30.00	30.00	....	....	14.00	13.80	11.00	11.50	11.25	12.35	12.50	21.50	28.50	....
AV.	**30.00**	**30.00**	**29.70**	**30.00**	**30.00**	**96.55**	**96.55**	**14.00**	**13.80**	**11.00**	**11.50**	**11.25**	**12.35**	**12.50**	**21.50**	**28.50**	**85.25**
HI.	**30.00**	**30.00**	**29.70**	**30.00**	**30.00**	**97.875**	**97.875**	**14.00**	**13.80**	**11.00**	**11.50**	**11.25**	**12.35**	**12.50**	**21.50**	**28.50**	**85.25**
LO.	**30.00**	**30.00**	**29.70**	**30.00**	**30.00**	**95.50**	**95.50**	**14.00**	**13.80**	**11.00**	**11.50**	**11.25**	**12.35**	**12.50**	**21.50**	**28.50**	**85.25**

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Copper Brands

Deliverable Against Commodity Exchange, Inc.

Brand or Marks	Producer	Grade
B. E. R.	American Smelting & Refining Co. (Baltimore, Md.)	Electrolytic
P. A.	American Smelting & Refining Co. (Maurer, N. J.)	Electrolytic
T	American Smelting & Refining Co. (Tacoma, Wash.)	Electrolytic
B. & M.	Anaconda Copper Mining Co.	Electrolytic
AE	Andes Copper Mining Co.	Electrolytic
BOLIDEN	Bolidens-Gruvaktiebolag	Electrolytic
C. C. R.	Canadian Copper Refiners Ltd. (Montreal)	Electrolytic
C de P Peru	Cerro de Pasco Corporation	Electrolytic
C. C. C.	Chile Copper Company	Electrolytic
TADANAC	Consolidated Mining & Smelting Co.	Electrolytic
F E C	Falconbridge Nickel Mines, Ltd.	Electrolytic
K U E	Kennecott Copper Corp.	Electrolytic
L. M. C.	Lewin Metals Corporation	Electrolytic
M U F	Mufulira Copper Mines, Ltd.	Electrolytic
N A	Norddeutsche Affinerie	Electrolytic
O R C	Ontario Refining Co., Ltd.	Electrolytic
A. L. S.	Philps Dodge Refining Corp. (For Adolph Lewisohn Selling Corp.)	Electrolytic
L. N. S.	Phelps Dodge Refining Corp.	Electrolytic
P • D	Phelps Dodge Corporation	Electrolytic
N. E. C.	Raritan Copper Works	Electrolytic
R E C	Rhokana Corporation	Electrolytic
B O R	Rudnici Bakra i Topionice	Electrolytic
U M K	Union Miniere du Haut Katanga	Electrolytic
D R W	†United States Metals Refining Co.	Electrolytic
AMCO	†United States Metals Refining Co.	Electrolytic
OFHC	†United States Metals Refining Co.	Electrolytic
W E K	Zinnwerke Wilhelmsburg G.m.b.H.	Electrolytic

†Subsidiary, The American Metal Co., Ltd.

Brand or Marks	Producer	Grade
C & H	Calumet & Hecla Consolidated Copper Co.	Lake
C. R.	Copper Range Company	Lake
Q. M. CO.	Quincy Mining Company	Lake

Brand or Marks	Producer	Grade
B. C. R.	British Copper Refiners, Ltd.	Fire Refined High Conductivity
N. H. E.	Nassau Smelting & Refining Co., Inc.	Fire Refined High Conductivity

Brand or Marks	Producer	Grade
• • • (3 Star)	Braden Copper Company	Fire Refined (other than Lake & Fire Refined High Conductivity)
K C M	Kennecott Copper Corporation	
M T D	Messina (Transvaal) Development Co.	
P. D. M.	Phelps Dodge Corporation	
R	†United States Metals Refining Company	

Official List of Approved Refiners

Whose CATHODES are deliverable against Commodity Exchange, Inc., Copper Contract

American Smelting & Refining Co.
Anaconda Copper Mining Co.
Andes Copper Mining Co.
Bolidens Gruvaktiebolag
Canadian Copper Refiners, Ltd.
Cerro de Pasco Copper Corp.
Chile Copper Company
Consolidated Mining & Smelting Co.
Falconbridge Nickel Mines, Ltd.
Kennecott Copper Corp.
Lewin Metals Corp.
Mufulira Copper Mines, Ltd.
Norddeutsche Affinerie
Ontario Refining Co., Ltd.
Phelps Dodge Refining Corp.
Phelps Dodge Corporation
Raritan Copper Works
Rhokana Corporation
Rudnici Bakra i Topionice
Union Miniere du Haut Katanga
United States Metals Refining Co.
Zinnwerke Wilhelmsburg G.m.b.H.

Lead Brands

Refined At	Producer	Brand Mark
Federal, Ill., U. S.	American Smelting & Refining Co.	•ALTON
Carteret, N. J., U. S.	United States Metals Refining Co.	••A M CO
Monterrey, Mexico	American Smelting & Refining Co.	•ASARCO MONTERREY
Port Pirie, Australia	Broken Hill Associated Smelters	•B.H.A.S.
Indianapolis, Ind., U. S.	American Lead Corp., The	†aBLUE ARROW AMERICAN LEAD CORP
Braubach a/Rhein, Germany	Blei-und Silberhutte Braubach	•Braubach dopp. raff. Deutschland
Idaho, U. S.	Bunker Hill Smelter	•BUNKER "C" HILL
Aroya, Peru	Cerro de Pasco Copper Corp.	•CERRO PERU
Collinsville, Ill., U. S.	St. Louis Smelting & Refining Co.	†aCHEMICAL ST. L. S. & R. CO.
Monterrey, N. L., Mexico	Compania Metalurgica Penoles, S.A.	••C.M.F. y A.M.
Alton, Ill., U. S.	St. Joseph Lead Company	•DOE RUN
Oker, Germany	Unterharzer Berg- und Huttenwerke	•D.Raff.U.H.Blei
Joplin, Mo., U. S.	Eagle-Picher Mining & Smelting Co.	•EAGLE-PICHER
Kamioka, Japan	Mitsui Mining Co.	•E.M.K.
Stolberg, Rhineland, Germany	Stolberger Zinc Aktiengesellschaft fur Bergbau und Hattenbetrieb	•Eschweiler raffine
Federal, Ill., U. S.	Metals Refining Company	•FEDERAL
Chicago, Ill., U. S.		†G B
Hoboken, Belgium	American Smelting & Refining Co.	•H.E.R. Escaut
Alton, Ill., U. S.	Goldsmith Bros. Smelting & Refining Co.	•HERCULANEUM
Omaha, Neb., U. S.	Societe Generale Metallurgique de Hoboken	•ILR
Monsanto, Ill., U. S.	St. Joseph Lead Company	†MONSANTO
Monteponi, Italy	International Smelting & Refining Co.	•Monteponi
San Gavino Monreale, Sardinia, Italy	Lewin Metals Corp., The	•Montevecchio
Hammond, Ind., U. S.	Societa di Monteponi Montevecchio Societa Italiana del Piombo e dello Zinco	†M R CO METALS REFINING CO.
Omaha, Neb., U. S.	American Smelting & Refining Co.	•OMAHA & GRANT
Overpelt, Belgium	Compagnie des Metaux d-Overpelt-Lommel et de Corphalie, S.A.	•Overpelt extra-raffine O.V.-L.L.-Dur.
Megrine, Tunis	Ste. Min. & Metall. de Penarroya	•Penarroya
Penarroya, Sopwith & Cartagena, Spain	Ete Min. & Met. de Penarroya	•Penarroya
Perth Amboy, N. J., U. S.	American Smelting & Refining Co.	•PERTH AMBOY
Genoa, Italy	Societa di Pertusola	•Pertusola
Alton, Ill., U. S.	St. Joseph Lead Company	•ST. JOE
Collinsville, Ill., U. S.	St. Louis Smelting & Refining Co.	†aST. L. S. & R. CO.
Selby, Calif., U. S.	American Smelting & Refining Co.	•SELBY
Trail, B. C., Canada	Consolidated Mining & Smelting Co. of Canada, Ltd	•TADANAC
Baelen-Usines, Belgium	Ste des Mines and Founderies de Zinc de la Vieille-Montagne Anglem	•Three Stars Vieille-Montagne Bar
Mexica, Yugoslavia	Central European Mines, Limited	•TREPCA
Perth Amboy, N. J., U. S.	American Smelting & Refining Co.	•TSUMCO
Hoboken, Belgium	The Tsumeb Corporation	•TSUMCO
Midvale, Utah, U. S.	United State Smelting, Refining & Mining Company	•USS CO
E. Chicago, Ind., U. S.	United States Smelting, Refining & Mining Company	•U S S CO ELECTRO
Norfolk, Va., U. S.	Virginia Lead Smelting Corp., The	†aVIRGINIA

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••Subsidiary of the American Metal Co., Ltd.

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aSubsidiary of National Lead Co.

Copper Statistics Reported by Copper Institute

Combined Totals in U. S. A. and Outside U. S. A.

(In tons of 2,000 pounds)

	Crude Production		Refined	Deliveries to	Refined Stock	Stock Increases or Decreases		
	Primary	Secondary	Production	Customers	End of Period	Blister	Refined	Total
1951 Total	**2,343,422**	**62,270**	**2,424,802**	**2,381,237**	**223,731**	**—19,110**	**+34,772**	**+15,662**
1952 Total	**2,362,887**	**55,858**	**2,385,538**	**2,451,093**				
1953								
Aug.	202,926	6,573	199,314	150,893	288,045	+ 7,960	+45,986	+53,946
Sept.	195,086	9,231	185,603	153,782	309,243	+18,714	+19,727	+38,441
Oct.	197,840	11,083	218,770	180,777	342,984	— 9,847	+33,741	+23,894
Nov.	180,169	6,541	198,239	180,917	354,370	—11,529	+11,386	— 143
Dec.	197,287	10,930	221,823	199,202	369,723	—11,945	+15,353	+ 3,408
1953 Total	2,397,540	123,210	2,514,969	2,275,060	369,723	+ 7,836	+180,762	+188,598
1954								
Jan.	191,564	7,835	196,653	169,386	388,631	+ 2,746	+20,389	+23,135
Feb.	177,075	7,096	174,360	163,474	393,792	+ 9,811	+ 5,161	+14,972
Mar.	196,870	8,254	211,370	189,030	405,563	— 6,241	+11,771	+ 5,525
April	195,823	6,662	200,364	203,772	397,593	+ 2,121	— 7,970	— 5,849
May	189,670	6,922	203,967	226,202	337,345	— 7,375	—60,248	—67,623
June	198,616	11,482	200,736	236,575	249,832	+ 9,362	—87,513	—78,151
July	196,643	9,609	212,857	202,652	239,479	— 6,605	—10,353	—16,598
In U. S. A.								
1951 Total	**964,589**	**56,910**	**1,199,784**	**1,367,787**	**71,528**	.....	**+22,488**	.....
1952 Total	**961,886**	**46,003**	**1,189,112**	**1,445,765**				
1953								
June	75,838	9,110	127,294	139,300	58,126	.....	+ 5,364	.....
July	79,938	8,125	122,036	104,481	77,100	.....	+18,974	.....
Aug.	79,376	5,577	108,974	106,985	78,825	.....	+ 1,725	.....
Sept.	78,952	7,796	114,760	104,886	72,907	.....	— 5,918	.....
Oct.	83,433	9,002	126,138	110,519	84,303	.....	+11,396	.....
Nov.	79,934	5,790	119,230	100,908	93,274	.....	+ 8,971	.....
Dec.	78,500	10,232	123,296	112,244	89,193	.....	— 4,081	.....
1953 Total	957,434	109,972	1,395,003	1,443,719	89,193	.....	+30,335	.....
1954								
Jan.	76,912	7,304	111,555	77,091	108,121	.....	+20,409	.....
Feb.	68,034	6,394	103,496	87,795	118,417	.....	+10,296	.....
March	73,429	7,671	117,546	95,795	125,759	.....	+ 7,342	.....
April	70,977	6,486	112,617	104,579	124,523	.....	— 1,236	.....
May	71,571	6,660	108,403	111,005	82,111	.....	—42,412	.....
June	74,113	11,216	112,121	106,252	69,181	.....	—12,930	.....
July	64,504	9,251	107,095	97,436	68,921	.....	— 260	.....
Outside U. S. A.								
1951 Total	**1,378,883**	**5,360**	**1,225,018**	**1,013,450**	**152,203**	.....	**+12,284**	.....
1952 Total	**1,401,001**	**9,582**	**1,196,426**	**1,005,329**				
1953								
Aug.	123,550	996	92,565	46,133	209,220	.....	+42,790	.....
Sept.	116,134	1,435	70,843	48,896	236,336	.....	+27,116	.....
Oct.	114,407	2,081	92,632	70,258	258,681	.....	+22,345	.....
Nov.	100,235	751	79,009	80,009	280,530	.....	+19,434	.....
Dec.	120,448	698	98,527	86,958	261,096	.....	+ 2,415	.....
1953 Total	1,441,874	13,238	1,119,966	831,341	280,530	.....	+150,427	.....
1954								
Jan.	114,652	531	85,100	91,941	280,510	.....	— 20	.....
Feb.	109,041	702	70,864	74,457	275,375	.....	— 5,135	.....
Mar.	123,441	583	93,824	93,235	279,804	.....	+ 4,429	.....
April	124,846	176	87,747	99,193	273,070	.....	— 6,734	.....
May	118,099	262	95,564	115,197	255,234	....	—17,836	.....
June	124,503	266	88,615	130,323	180,651	.....	—74,583	.....
July	132,139	355	105,762	105,216	170,558	.....	—10,093	.....

*Excluding Russia, Yugoslavia, Norway, Sweden, Japan, Australia.

Electrolytic Copper

Price, Del. Conn. Valley
Monthly Average Prices
(Cents Per Pound)

	1951	1952	1953	1954
Jan.	24.50	24.50	24.50	29.88
Feb.	24.50	24.50	25.46	29.88
Mar.	24.50	24.50	31.49	29.93
Apr.	24.50	24.50	30.59	29.98
May	25.31	27.829	29.72	30.00
June	24.50	24.50	29.94	30.00
July	24.50	24.50	29.92	30.00
Aug.	24.50	24.50	29.69	....
Sept.	24.50	24.50	29.75	....
Oct.	24.50	24.50	29.80	....
Nov.	24.50	24.50	29.88	....
Dec.	24.50	24.50	29.88	....
Aver.	24.50	24.50	29.15	....

Lake Copper

Producers' Price, Delivered
Monthly Average Prices
(Cents Per Pound)

	1951	1952	1953	1954
Jan.	24.625	24.625	24.625	30.00
Feb.	24.625	24.625	24.625	30.00
Mar.	24.625	24.625	32.00	30.00
Apr.	24.625	24.625	32.23	30.00
May	24.625	24.625	Nom	30.00
June	24.625	24.625	30.125	30.00
July	24.625	24.625	30.125	30.00
Aug.	24.625	24.625	30.125	....
Sept.	24.625	24.625	30.125	....
Oct.	24.625	24.625	30.125	....
Nov.	24.625	24.625	30.125	....
Dec.	24.625	24.625	30.038	....
Aver.	24.625	24.625	29.47	....

Export Copper

Electrolytic f.a.s. New York
Monthly Average Prices
(Cents Per Pound)

	1951	1952	1953	1954
Jan.	24.50	27.50	34.825	28.635
Feb.	24.50	27.50	34.825	28.59
Mar.	24.50	27.50	35.131	29.544
Apr.	24.50	27.50	35.89	29.93
May	24.50	24.50	29.89	30.00
June	27.50	34.415	29.75	30.00
July	27.50	34.537	29.692	30.00
Aug.	27.50	34.825	29.075	....
Sept.	27.50	34.825	29.00	....
Oct.	27.50	34.825	29.053	....
Nov.	27.50	34.825	28.875	....
Dec.	27.50	34.825	28.774	....
Aver.	26.318	31.742	31.218	....

Fabricators' Copper Statistics

(In Tons of 2,000 Pounds)

	Fabricators' Stocks of Refined Cop.	Unfilled Purchases of Refined by Fab. from Producers	Fabricators' Working Stocks	Unfilled Sales by Fabricators to Customers	Actual Copper Consmd. by Fabricators	Excess Fabricators' Stocks Over Orders Bkd.
1948						
Total	.....	.....	.....	.....	1,394,307	.....
1949						
Total	.....	.....	.....	.....	1,053,225	.....
1950						
Total	.....	.....	.....	.....	1,438,327	.....
1951						
Dec.	280,402	32,147	295,385	303,050	106,536	—285,886
Total	.....	.....	.....	.....	1,392,111	.....
1952						
Jan.	267,427	36,239	294,202	292,932	131,988	—283,468
Feb.	258,279	42,911	291,475	292,069	115,150	—282,354
Mar.	254,868	34,085	292,932	309,855	116,887	—313,834
Apr.	256,798	39,834	288,673	318,198	106,109	—310,239
May	240,962	41,135	289,822	304,639	109,890	—312,364
June	245,730	39,513	286,576	299,124	107,709	—300,457
July	281,064	53,716	293,220	303,765	82,419	—262,205
Aug.	298,849	50,399	287,512	294,280	119,280	—232,544
Sept.	308,036	47,188	295,275	285,465	122,934	—225,516
Oct.	311,676	45,970	290,634	285,114	125,325	—218,102
Nov.	315,608	33,710	292,028	280,716	130,031	—223,426
Dec.	333,455	32,652	292,157	275,312	117,303	—201,362
Total	.....	.....	.....	.....	1,389,451	— .....
1953						
Jan.	321,212	43,195	294,467	275,736	134,203	—205,796
Feb.	312,177	52,990	290,367	296,760	123,850	—221,960
Mar.	319,356	47,685	292,447	291,979	122,980	—217,385
Apr.	342,771	53,501	295,096	298,532	116,319	—197,356
May	364,197	49,952	293,794	285,425	126,972	—165,070
June	363,020	40,759	297,387	268,099	132,615	—161,707
July	375,629	39,936	302,113	259,641	91,826	—146,189
Aug.	366,244	42,490	305,204	235,893	113,250	—132,363
Sept.	358,081	38,593	307,612	206,476	111,805	—117,414
Oct.	352,091	31,035	305,431	187,438	116,259	—109,743
Nov.	350,804	34,380	305,877	165,047	102,258	— 85,740
Dec.	380,881	25,022	309,664	170,917	83,652	— 74,678
Total	.....	.....	.....	.....	1,375,869	.....
1954						
Jan.	355,632	26,423	307,014	142,588	100,805	— 67,547
Feb.	349,661	26,227	305,670	122,999	94,975	— 52,781
Mar.	341,693	28,836	304,065	123,387	103,796	— 57,423
Apr	341,616	30,677	302,391	124,559	104,943	— 54,657
May	349,796	33,210	305,504	123,039	102,810	— 45,537
June	351,398	43,723	304,833	122,321	104,651	— 32,033

Scrap Copper Receipts by Custom Smelters and Refineries in United States*

(In Short Tons)

	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
Jan.	3,247	3,077	7,080	10,172	17,084	15,763	6,640	4,528	6,486	9,859
Feb.	2,877	1,576	5,394	11,890	20,238	12,500	5,153	3,633	10,337	8,490
Mar.	4,398	2,116	9,187	11,954	20,678	13,538	7,912	5,243	19,991	9,738
Apr.	5,249	2,750	13,065	15,125	15,968	12,304	8,553	6,214	16,584	9,004
May	4,427	2,455	14,264	16,357	14,237	8,749	8,458	8,033	10,857	8,687
June	4,733	2,230	9,883	11,176	8,809	20,523	8,628	4,425	10,945	13,309
July	5,342	2,581	8,578	8,370	7,782	10,040	6,642	5,188	9,063	10,260
Aug.	5,353	2,117	8,572	17,081	8,246	10,452	6,113	5,003	7,137	....
Sept.	4,504	4,832	10,611	16,001	10,980	4,903	3,561	4,667	9,042	....
Oct.	4,615	2,932	8,532	10,854	6,401	9,459	3,336	4,602	10,065	....
Nov.	4,080	3,079	8,070	7,625	15,347	9,237	3,179	4,724	7,815	....
Dec.	3,411	4,081	9,154	11,826	10,533	7,178	4,538	6,208	11,476	....
Total	51,866	33,826	112,386	147,931	156,303	142,067	71,812	62,470	129,798	.....

*As compiled by Copper Institute.

Brass and Bronze Ingot Monthly Shipments

(Net Tons)

The following figures showing the combined shipments of ingot brass and bronze are compiled by the Ingot Brass and Bronze Industry and represent in excess of 95 per cent of the deliveries of the entire industry.

	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
Jan.	43,569	41,021	29,196	27,841	26,998	19,456	18,874	28,416	28,315	24,423	20,661
Feb.	43,340	39,297	24,580	24,686	22,487	15,026	18,487	27,168	24,211	25,429	19,920
Mar.	45,068	41,988	27,176	27,477	24,282	14,550	22,494	31,997	23,890	28,256	23,653
Apr.	43,151	40,118	30,228	24,577	25,177	10,695	22,118	30,472	22,547	25,044	24,746
May	45,418	37,262	27,333	19,525	23,716	11,114	23,643	33,267	21,740	21,660	22,269
June	40,677	32,613	31,349	16,929	24,401	9,696	25,093	33,817	21,274	20,818	22,348
July	40,532	27,995	26,677	16,728	20,456	10,220	21,609	32,016	18,947	19,321	.....
Aug.	40,957	25,372	27,896	18,589	24,098	14,194	26,689	25,285	21,807	20,156	.....
Sept.	38,333	20,165	27,390	19,025	23,641	16,208	28,811	22,285	22,770	21,463	.....
Oct.	41,009	23,527	31,461	22,806	21,559	18,026	32,240	23,124	25,811	22,280	.....
Nov.	38,845	22,966	29,232	21,666	21,731	18,488	31,748	23,544	23,441	21,860	.....
Dec.	35,513	20,488	27,206	23,862	20,954	17,960	28,757	20,987	22,983	20,541	.....
Total ...	496,412	372,812	339,724	263,711	279,500	176,643	303,563	332,378	277,736	271,251	.....
Aver.	41,368	31,068	28,310	21,976	23,292	14,637	25,297	27,615	23,145	22,604	.....

Mine Production of Copper in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern	Missouri	Western	Total
1949				
Ttl.	32,955	3,670	716,121	752,750
1950				
Ttl.	40,105	2,982	866,250	885,942
1951				
Ttl.	41,119	2,422	884,788	928,330
1952				
Ttl.	36,758	1,726	885,985	924,469
1953				
Feb.	3.095	197	69,025	72,317
Mar.	3,341	169	77,376	80,886
Apr.	3,544	164	75,998	79,706
May	2,872	150	77,828	80,850
June	3,128	173	70,334	73,635
July	3,440	183	72,869	76,492
Aug.	3,049	146	72,386	75,581
Sept.	3,029	199	72,214	75,442
Oct.	3,604	219	76,146	80,005
Nov.	3,043	180	71,942	75,165
Dec.	3,482	170	73,367	77,019
Ttl.	39,069	2,100	883,440	924,600
1954				
Jan.	3,077	147	71,473	74,697
Feb.	2,949	183	62,167	65,299
Mar.	3,560	148	67,581	71,289
Apr.	3,047	153	65,138	68,383
May	3,136	141	68,090	71,367

Average Custom Smelters' Scrap Buying Prices

(Cents per pound del. refinery for 60,000 lbs. of each grade)

	No. 1 Copper Scrap	No. 2 Copper Scrap	Light Copper Scrap	Refinery Brass*
1953				
June	.23.942	22.442	20.942	20.077
July	..23.56	22.31	21.13	20.38
Aug.	.22.08	20.58	19.08	17.06
Sept.	.23.50	22.00	20.50	19.00
Oct.	..23.875	22.192	20.692	19.00
Nov.	.25.00	23.00	21.50	19.50
Dec.	..24.46	22.73	21.23	19.50
Av.	..33.955	20.405	20.855	20.036
1954				
Jan.	..23.48	21.98	20.48	19.22
Feb.	..24.00	22.50	21.00	20.00
Mar.	.25.84	23.97	22.10	21.09
Apr.	..26.42	24.92	23.42	21.77
May	..27.04	25.54	24.04	22.58
June	.27.125	25.625	24.125	22.875
July	..27.09	25.59	24.09	22.93

*Of dry content for material having a dry copper content in excess of 60%.

Brass Ingot Makers' Scrap Copper Buying Prices

(Average Prices)

(Cents per pound for carload lots del. consumers' works)

	No. 1 Copper Scrap	No. 2 Copper Scrap	No. 1 Composition	Heavy Yellow Brass
1953				
June	.23.942	22.442	18.14	13.97
July	..23.67	22.29	18.28	14.02
Aug.	.21.35	20.51	17.86	12.57
Sept.	.23.00	21.50	17.25	13.25
Oct.	..24.096	22.692	17.481	13.163
Nov.	.25.00	23.50	18.25	13.75
Dec.	..24.77	22.15	18.17	13.67
Av.	.. 23.524	21.934	18.862	14.127
1954				
Jan.	..23.68	22.02	18.08	13.61
Feb.	..24.50	23.00	17.75	13.50
Mar.	.25.53	24.03	18.49	14.16
Apr.	..26.39	24.89	20.02	15.35
May	..27.03	25.53	21.50	16.50
June	.27.01	25.51	21.50	16.50
July	..26.90	25.38	21.40	16.69

United States Lead Statistics of Primary Refineries

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	Stock At Beginning	Production Primary & Secondary	Total Supply	Stock At End	Domestic Shipments
1948	21,328	511,356	532,684	38,644	490,630
1949	38,644	542,676	581,320	70,424	355,905
1950	70,424	571,763	642,187	35,619	499,637
1951	35,619	486,874	522,493	25,339	496,184
1952	.....	532,778	558,117	.....	492,094
1953					
January	43,560	47,295	90,855	52,760	35,529
February	52,760	45,423	98,183	58,949	36,811
March	58,949	47,993	106,942	62,371	42,242
April	62,371	46,729	109,100	69,608	39,487
May	69,608	43,187	112,795	63,879	48,914
June	63,879	36,880	100,759	56,569	44,140
July	56,569	40,210	96,779	61,017	35,652
August	61,017	38,022	99,039	58,103	40,836
September	58,103	42,154	100,257	58,490	41,598
October	58,490	44,741	103,231	58,236	44,987
November	58,236	52,562	110,798	67,494	43,234
December	67,494	48,687	116,181	81,152	35,007
Total	.....	533,883	577,443	.....	488,437
1954					
January	81,152	48,518	129,670	92,496	37,108
February	92,496	42,046	134,542	97,981	36,551
March	97,981	50,808	148,789	100,927	47,837
April	100,927	46,730	147,657	100,441	47,161
May	100,441	49,139	149,580	109,302	40,183
June	109,302	42,317	151,619	104,626	46,987

In instances where the figures are not in balance it is due to shipments to other than domestic consumers.

Industrial Classification of Domestic Lead Shipments

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	Cable	Amm.	Foil	Batt'y	Brass Making	Sundries	Jobbers	Unclassified
1948	**114,253**	**42,080**	**2,258**	**97,637**	**4,921**	**41,524**	**8,076**	**215,150**
1949	**56,273**	**12,443**	**1,139**	**72,475**	**3,190**	**37,549**	**4,117**	**168,719**
1950	**66,646**	**28,854**	**3,304**	**93,297**	**6,374**	**60,118**	**10,450**	**230,594**
1951	70,149	32,099	2,063	75,337	5,583	48,248	3,550	259,155
1952								
Mar.	7,055	1,675	187	3,907	757	3,616	441	21,523
Apr.	7,132	2,054	25	5,752	406	3,543	250	18,750
May	6,904	1,350	50	4,875	346	2,703	622	12,694
June	5,981	3,174	60	6,492	235	3,750	668	19,143
July	4,654	3,677	175	8,339	450	6,071	663	25,676
Aug.	6,330	2,401	100	7,773	276	4,540	685	19,164
Sept.	7,899	3,224	80	9,929	226	4,282	458	19,720
Oct.	7,548	2,475	60	7,221	480	3,668	318	19,200
Nov.	5,714	2,434	150	5,855	595	7,927	514	25,072
Dec.	5,536	2,594	110	5,840	385	3,319	253	21,333
Total	74,616	30,809	1,374	77,238	5,160	50,943	5,671	246,283
1953								
Jan.	5,183	1,554	186	5,567	352	3,763	204	18,720
Feb.	6,248	4,509	61	6,098	438	3,267	417	15,773
Mar.	6,175	2,796	323	7,011	415	5,641	509	19,372
Apr.	5,833	3,103	102	8,369	295	3,711	453	17,621
May	6,829	3,450	370	8,480	752	5,118	605	23,310
June	6,420	3,315	290	7,018	528	5,892	196	20,481
July	5,123	3,161	35	6,304	205	5,047	168	15,609
Aug.	5,226	2,335	120	9,435	745	5,382	268	17,325
Sept.	6,494	2,162	105	7,274	1,088	5,261	199	19,015
Oct.	9,612	2,782	160	6,346	307	4,628	1,987	19,165
Nov.	6,920	3,352	312	4,452	385	4,876	982	21,955
Dec.	6,220	1,896	72	3,985	206	3,350	402	18,876
Total	76,283	34,415	2,136	80,339	5,716	55,936	6,390	227,222
1954								
Jan.	6,273	2,955	....	5,077	964	5,051	628	16,160
Feb.	6,040	2,170	....	5,890	798	3,682	254	17,717
Mar.	7,620	2,405	252	6,663	149	6,818	492	23,438
Apr.	6,267	2,550	361	6,341	308	5,194	342	25,798
May	6,030	2,310	276	5,635	250	4,621	1,020	20,041
June	6,116	3,700	122	5,711	406	6,525	1,114	23,293

Lead Prices at New York

(Common Grade)
Monthly Average Prices
(Cents per pound)

	1951	1952	1953	1954
Jan.	17.00	19.00	14.192	13.26
Feb.	17.00	19.00	13.50	12.82
Mar.	17.00	19.00	13.404	12.94
Apr.	17.00	18.92	12.64	13.91
May	17.00	15.731	12.75	14.00
June	17.00	15.26	13.413	14.11
July	17.00	16.00	13.683	14.00
Aug.	17.00	16.00	14.00	....
Sept.	17.00	16.00	13.74	....
Oct.	18.926	14.426	13.50	....
Nov.	19.00	14.18	13.50	....
Dec.	19.00	14.125	13.50	....
Av.	17.494	16.47	13.485	....

Lead Sheet Prices

(To Jobbers, Full Sheets)
Monthly Average Prices
(Cents per pound)

	1951	1952	1953	1954
Jan.	22.00	24.00	19.192	18.26
Feb.	22.00	24.00	18.50	17.82
Mar.	22.00	24.00	18.404	17.94
Apr.	22.00	23.92	17.64	18.91
May	22.00	20.81	17.75	19.00
June	22.00	20.65	19.413	19.11
July	22.00	21.00	18.683	19.00
Aug.	22.00	21.00	19.00	....
Sept.	22.00	21.00	18.74	....
Oct.	22.44	19.48	18.50	....
Nov.	24.00	19.18	18.50	....
Dec.	24.00	19.125	18.50	....

Battery Shipments

The following table shows replacement battery shipments in the United States as compiled by the Business Information Division of Dun & Bradstreet, Inc., for the Association of American Battery Manufacturers.

(In thousands of units)

	1951	1952	1953	1954
Jan.	1,979	1,639	1,571	1,788
Feb.	1,469	963	1,162	1,422
Mar.	1,176	769	1,202	1,194
Apr.	1,892	850	1,245	1,150
May	1,480	1,137	1,455	1,396
June	1,443	1,535	2,004	....
July	1,705	2,526	2,528	....
Aug.	2,239	2,905	2,707	....
Sept.	2,172	2,874	2,852	....
Oct.	2,640	3,112	2,825	....
Nov.	2,232	2,168	2,173	....
Dec.	1,792	1,975	1,890	....
Total	22,219	22,453	23,614	....

Lead Stocks at Primary U. S. Smelters and Refiners

(American Bureau of Metal Statistics)

(In tons of 2,000 lbs.)

	In ore and matte and in process at smelters	— In base bullion (lead content) — At smelters & refineries	In transit to refineries	In process at refineries	Refined pig lead	Antimonial lead	Total Stocks
1946 ..	89,462	8,618	4,889	15,097	37,584	7,283	162,933
1947 ..	111,836	8,453	4,911	16,042	40,870	6,717	188,829
1948 ..	77,199	7,652	5,447	16,328	13,634	7,694	127,954
1949	76,373	9,697	4,101	17,939	29,050	9,594	146,754
1950 .	69,417	13,351	4,959	12,903	33,420	7,490	141,540
1951 ..	74,750	12,021	3,771	13,381	19,319	6,552	129,794
1952							
Dec. 1	69,696	15,518	4,992	17,614	24,543	11,143	143,506
1953							
Jan. 1	65,771	17,583	3,105	19,759	31,405	12,155	149,778
Feb. 1	62,565	18,181	1,757	19,090	41,188	11,572	154,353
Mar. 1	61,820	11,651	4,784	21,853	48,213	10,736	159,057
Apr. 1	61,036	13,656	2,506	21,464	50,887	11,484	161,033
May 1	56,867	14,490	1,936	20,010	58,360	11,248	162,911
June 1	56,892	13,299	3,181	20,135	53,115	10,764	157,386
July 1	65,655	14,237	2,250	20,865	42,234	14,335	159,576
Aug. 1	69,771	15,742	2,907	22,290	46,770	14,247	171,727
Sept. 1	83,673	15,332	2,964	22,960	43,355	14,748	183,032
Oct. 1	81,377	16,921	3,549	24,717	42,613	15,877	185,054
Nov. 1	79,283	19,446	2,664	26,785	42,494	15,742	186,414
Dec. 1	73,348	19,916	2,868	24,303	50,996	16,498	187,929
1954							
Jan. 1	67,688	17,920	2,867	26,713	65,036	16,116	196,340
Feb. 1	63,032	12,790	3,406	28,050	77,805	14,691	199,774
Mar. 1	63,175	12,226	4,482	28,140	83,183	14,798	206,044
Apr. 1	68,520	13,377	2,631	28,841	88,942	11,985	214,296
May 1	67,270	14,624	2,715	28,257	88,464	11,977	213,307
June 1	64,103	10,906	1,348	27,105	97,420	11,882	212,764
July 1	61,669	12,241	3,660	26,046	94,828	9,798	208,242

Receipts of Lead in Ore and Scrap
By U. S. Smelters (a)

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	Receipts of lead in ore			Receipts of lead in scrap etc. (b)	Total receipts in ore, & scrap
	United States	Foreign	Total		
1947 Total	401,336	52,347	453,683	71,480	525,163
1948 Total	387,967	70,994	458,961	47,898	506,859
1949 Total	420,122	93,061	513,183	58,447	571,630
1950 Total	430,072	76,160	506,232	43,666	549,898
1951 Total	376,851	75,515	452,366	36,510	488,876
1952					
June	32,962	3,173	36,135	1,983	38,118
July	28,829	6,668	35,497	2,539	38,036
August	32,393	11,166	43,559	2,560	46,119
September	32,919	5,095	38,014	3,549	41,563
October	33,770	6,925	40,695	3,707	44,402
November	30,537	14,009	44,546	2,663	47,209
December	32,769	10,317	43,086	3,690	46,776
Total	405,990	98,276	504,266	41,845	546,111
1953					
January	30,697	10,191	40,888	3,887	44,775
February	30,388	10,008	40,396	2,935	43,331
March	32,660	12,974	45,634	2,513	48,147
April	31,557	8,895	40,452	2,675	43,127
May	28,793	11,856	40,649	2,019	42,668
June	30,753	11,611	42,364	3,441	45,805
July	27,339	17,082	44,421	4,061	48,482
August	27,709	19,548	47,257	5,562	52,819
September	27,637	12,190	39,827	4,625	44,452
October	27,934	17,063	44,997	3,680	48,677
November	26,904	13,603	40,507	4,016	44,523
December	28,812	10,767	39,579	3,580	43,159
Total	351,183	155,788	506,971	42,994	549,965
1954					
January	26,202	13,309	39,511	3,162	42,673
February	29,342	10,888	40,230	3,373	43,603
March	31,520	12,006	43,526	3,550	47,076
April	28,508	13,173	41,681	4,524	46,205
May	25,762	11,141	36,903	4,484	41,387
June	28,266	11,750	40,016	3,300	43,316

(a) Receipts of lead in ore are computed on the basis of recoverable lead. Owing to the estimational factor in this, which is probably on the low side, and also to the possibility that some lead receipts may escape attention, these monthly totals probably underrun the actual production of pig lead. (b) inclusive only of scrap smelted in connection with ore, plus some scrap received by primary refiners.

N. Y. Lead Price Changes

(Effective Date)

1949		Oct. 7	15.00
July 12	13.50	Oct. 14	14.00
July 13	14.00	Oct. 22	13.50
July 25	14.25	Nov. 3	14.00
July 27	14.50	Nov. 10	14.20
Aug. 2	14.75	Nov. 11	14.50
Aug. 18	15.125	Nov. 20	14.25
Sept. 26	14.75	Nov. 24	14.00
Oct. 3	14.25	Dec. 22	14.25
Oct. 7	13.75	Dec. 29	14.50
Oct. 14	13.00	Dec. 31	14.75
Nov. 10	12.75	1953	
Nov. 16	12.50	Jan. 7	14.50
Nov. 21	12.00	Jan. 12	14.00
1950		Feb. 2	13.50
Mar. 9	11.00	Mar. 4	13.00
Mar. 14	10.50	Mar. 10	13.50
Apr. 20	10.75	Apr. 7	13.00
Apr. 26	11.00	Apr. 16	12.50
May 4	11.25	Apr. 21	12.00
May 10	11.50	Apr. 29	12.50
May 11	12.00	May 18	12.75
June 28	11.50	May 19	13.00
1951		May 26	13.15
June 28	11.00	June 11	13.50
July 12	11.50	July 20	13.75
July 13	12.00	July 23	14.00
Aug. 15	13.00	Sept. 16	13.50
Aug. 21	14.00	1954	
Sept. 1	15.00	Jan. 18	13.00
Sept. 8	16.00	Feb. 18	12.50
Oct. 2	**19.00	Mar. 9	12.75
Oct. 31	17.00	Mar. 10	13.00
1952		Mar. 26	13.25
Apr. 29	18.00	Mar. 29	13.50
May 2	17.00	Apr. 1	13.75
May 12	15.00	Apr. 12	14.00
June 23	15.50	June 2	14.25
June 24	16.00	June 15	14.00

*OPA Ceiling. †Returned to OPA Ceiling. **OPS Ceiling.

Antimonial Lead Stocks at Primary Refineries

(A. B. M. S.)

(In tons of 2,000 lbs.)

End of:	1951	1952	1953	1954
Jan.	7,293	7,430	11,572	14,961
Feb.	8,738	7,805	10,736	14,798
Mar.	7,894	9,169	11,484	11,985
Apr.	8,269	9,646	11,248	11,977
May	8,519	9,931	10,764	11,882
June	7,044	10,323	14,335	9,798
July	8,854	10,049	14,247	.....
Aug.	7,215	11,253	14,748	.....
Sept.	6,998	9,874	15,877	.....
Oct.	6,543	10,967	15,742	.....
Nov.	6,552	11,143	16,498	.....
Dec.	6,821	12,155	16,116	.....

Antimonial Lead Production by Primary Refineries

(A. B. M. S.)

(In tons of 2,000 lbs.)

End of:	1951	1952	1953	1954
Jan.	6,356	5,767	2,937	3,768
Feb.	6,504	4,395	3,682	4,257
Mar.	5,617	3,800	5,353	4,475
Apr.	5,406	3,162	5,027	4,470
May	4,378	2,347	6,497	4,373
June	4,361	5,303	9,270	3,796
July	7,624	6,352	5,259	....
Aug.	2,716	6,492	4,668	....
Sept.	4,227	4,748	5,509	....
Oct.	4,862	5,867	5,100	....
Nov.	6,943	4,674	5,400	....
Dec.	6,317	3,947	3,060	....
Total	65,311	56,854	61,762	.....

U. S. Lead Consumption

(Bureau of Mines — In Short Tons)

Metal Products	1954 Jan.–May	Apr.	May
Ammunition	16,997	3,564	3,235
Bearing metals	11,905	2,021	1,921
Brass and bronze	8,036	1,707	1,528
Cable covering	54,923	11,137	9,971
Calking lead	18,341	4,241	4,158
Casting metals	3,394	658	718
Collapsible tubes	3,993	849	809
Foil	1,532	560	385
Pipes, traps and bends	10,013	2,305	2,050
Sheet lead	10,426	2,214	2,062
Solder	28,789	5,641	5,850
Storage batteries (antimonial lead)	68,338	14,044	14,231
(oxides)	64,981	13,341	13,255
Terne metal	586	120	116
Type metal	11,123	2,667	2,129
Total	313,377	65,069	62,418
Pigments:			
White lead	7,101	1,476	1,917
Red lead and litharge	33,554	7,374	6,701
Pigment colors	5,748	1,411	1,097
Other†	3,710	719	695
Total	50,113	10,980	10,410
Chemicals:			
Tetraethyl lead	68,683	13,475	15,190
Misc. chemicals	3,619	677	468
Total	72,302	14,152	15,658
Misc. Uses:			
Annealing	1,606	339	315
Galvanizing	645	93	135
Lead plating	261	70	57
Weights and ballast	2,800	631	587
Total	5,312	1,133	1,094
Other Uses Unclassified	6,121	1,406	1,117
Total Reported	447,225	92,740	90,697
Estimated unreported consumption	5,000	1,000	1,000
Total	452,200	93,700	91,700
Daily average‡	2,995	3,123	2,958

† Includes lead content of leaded zinc oxide production.

‡ Based on number of days in month without adjustment for Sundays or holidays.

U. K. Lead Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 pounds)

	1952	1953	1954
Jan.	27,986	27,192	25,786
Feb.	25,096	24,552	25,837
Mar.	24,695	25,226	29,442
Apr.	22,359	24,869	25,820
May	24,093	24,350	28,637
June	21,903	23,612	.....
July	23,746	23,455	.....
Aug.	18,542	20,599	.....
Sept.	24,902	27,426	.....
Oct.	28,946	28,014	.....
Nov.	26,996	27,358	.....
Dec.	24,056	26,582	.....
Total	293,320	303,753	.....

American Antimony

Monthly Average Prices in bulk, f.o.b. Laredo (Cents per lb. in ton lots)

	1951	1952	1953	1954
Jan.	35.46	50.00	34.50	28.50
Feb.	42.00	50.00	34.50	28.50
Mar.	42.00	50.00	34.50	28.50
Apr.	42.00	48.85	34.50	28.50
May	42.00	42.077	34.50	28.50
June	42.00	39.00	34.50	28.50
July	42.00	39.00	34.50	28.50
Aug.	42.00	39.00	34.50	....
Sept.	42.00	39.00	34.50	....
Oct.	42.00	39.00	34.50	....
Nov.	44.738	35.61	33.68	....
Dec.	50.00	34.50	28.50	....
Av.	42.354	42.17	33.93	....

Lead Imports and Exports by Principal Countries

(A.B.M.S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1954 Mar.	Apr.	May
IMPORTS			
U. S.† (s.t.)	21,149	28,496	29,030
Canada (s.t.)	1	41	...
Belgium	2,109	1,744	...
Denmark	1,248	2,665	1,523
France	4,057	2,822	4,878
Germany†	5,764	4,150	...
Italy*	1,653	1,012	...
Netherlands	4,069	2,581	...
Norway	285	1,250	...
Sweden	2,197	1,265	1,139
Switzerland	830	1,051	643
U. K. (l.t.)	14,509	15,796	17,299
India (l.t.)	979	578	...
EXPORTS			
U. S.† (s.t.)	41	56	49
Canada (s.t.)	11,091	9,606	11,483
Belgium	4,475	4,417	...
Denmark	711	626	795
France	223	318	4,807
Germany‡	2,367	4,023	..
Italy*	...	2	...
Netherlands	1,013	350	...
Switzerland	...	30	15
N. Rhodesia (l.t.)	1,102	809	...
Australia	23,080	...	...

† Refined.
‡ Includes scrap.
* Includes lead alloys.

French Lead Imports

(A.B.M.S.)

(In metric tons)

	1954 Apr.	May	June
Ore (gross weight)	5,290	6,910	9,353
Greece	...	298	...
Algeria	...	5	...
Fr. Morocco	4,242	6,338	8,563
Fr. Equat. Africa	1,048	269	790
Pig lead:			
Argentiferous	...	600	...
Morocco	...	600	...
Non-argentiferous	2,822	4,278	5,728
Mexico	101	...	...
Belgium	...	12	304
Germany (W.)	401	246	229
Spain	...	...	1,000
Algeria	13	...	35
Fr. Morocco	549	2,447	1,679
Tunisia	1,656	1,573	2,281
U. of S. Africa	100	...	...
Greece	...	...	200
Other countries	2	...	...
Antimonial lead	...	340	299

Consumers' Lead Stocks, Receipts and Consumption

(Bureau of Mines — In Short Tons)

	Stocks at plants on Mar. 31	Received during Apr.	Consumed during Apr.	Stocks at plants on Apr. 30
Refined soft lead	*65,628	65,138	61,380	69,386
Antimonial lead	*16,875	21,955	21,692	17,138
Unmelted white scrap	2,890	2,404	1,882	3,412
Percentage metals	7,912	3,188	3,196	7,904
Copper-base scrap	1,417	1,567	1,602	1,382
Drosses, residues, etc.	7,260	3,352	2,288	8,324
Total	*101,982	97,604	†92,040	107,546

* Revised.
† Excludes 700 tons of lead contained in leaded zinc oxide production.

Consumption of Lead by Class of Product

(Bureau of Mines — In Short Tons)

	Soft and Antimonial Lead	Scrap, Percentage Metal, Drosses, Etc.	Total
Metal products	56,237	8,832	65,069
Pigments	10,280	...	10,280
Chemicals	14,152	...	14,152
Miscellaneous	1,133		1,133
Unclassified	1,270	136	1,406
Total	83,072	8,968	†92,040

† Excludes 700 tons of lead contained in leaded zinc oxide production.

U. K. Lead Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

(Gross Weight)	1954 Apr.	May	June
Lead and lead alloys	15,796	17,299	15,581
Australia	11,967	12,944	10,703
Canada	2,450	2,750	2,800
Yugoslavia	200	1,000	175
United States	400	100	650
Peru	650	25	1,100
Other countries	129	480	153

Domestic Zinc Statistics

American Zinc Institute

Commencing with January, 1948, all regularly operating U. S. primary and secondary smelters are included in this report. Production from foreign ores also is included.

(Tons of 2,000 lbs.)

	Stock Beginning	Production	Shipments: Domestic	Shipments: Export & Drawback	Shipments: Gov't Acc't	Shipments: Total	Stock at End	Unfilled Orders at End	Daily Avg. Prod.
1947 Total		848,027	698,281	117,305	140,230	955,816			
1947 Monthly Avg.		70,669	58,190	9,775	11,686	79,651			2,323
1948 Total		850,015	770,396	69,910	57,598	897,904			
1948 Monthly Avg.		70,842	64,200	5,826	4,800	74,826			2,323
1949 Total		870,113	648,285	56,929	91,526	796,740			
1949 Monthly Ave.		72,509	54,024	4,744	7,627	66,395			2,384
1950 Total		910,354	849,246	18,189	128,256	995,691			
1950 Monthly Avg.		75,863	70,770	1,516	10,688	82,974			2,494
1951 Total		931,833	836,800	32,067	39,949	918,816			
1951 Monthly Avg.		77,653	69,733	3,506	3,329	76,568			2,553
1952									
Apr.	26,004	83,001	72,716	9,123	3,753	85,592	23,423	56,838	2,767
May	23,423	83,797	63,701	5,425	4,950	74,076	33,144	41,494	2,703
June	33,144	77,463	35,769	7,757	3,739	47,265	63,342	39,428	2,582
July	63,342	76,930	38,714	3,146	1,493	43,353	96,919	46,547	2,482
Aug.	96,919	78,167	72,963	4,091	1,381	78,435	96,651	44,522	2,521
Sept.	96,651	76,019	69,343	3,654	5,132	78,129	94,541	42,791	2,534
Oct.	94,541	80,588	71,659	3,827	4,301	79,787	95,342	37,533	2,600
Nov.	95,342	78,563	81,439	4,625	4,692	90,756	83,149	32,255	2,619
Dec.	83,149	81,363	71,175	2,615	3,562	77,352	86,160	45,264	2,627
Total		961,430	803,343	56,202	36,626	896,171			
Monthly Avg.		80,119	66,945	4,683	3,052	74,681			2,627
1953									
Jan.	87,160	81,994	77,573	2,205	901	80,679	88,475	39,782	2,645
Feb.	88,475	76,899	67,729	1,997	1,984	71,710	93,664	37,172	2,746
Mar.	93,664	83,485	72,388	1,315	3,582	77,285	99,864	54,524	2,693
Apr.	99,864	80,459	78,211	215	7,617	86,043	94,280	38,722	2,681
May	94,280	82,422	75,648	259	8,343	84,250	92,452	43,271	2,659
June	92,452	81,617	72,612	36	4,136	76,784	97,285	44,307	2,721
July	97,285	80,825	69,498	94	4,612	74,204	103,906	32,327	2,607
Aug.	103,906	83,241	65,450	428	3,372	69,250	117,897	32,988	2,685
Sept.	117,897	81,211	55,167	165	2,215	57,547	141,561	27,323	2,704
Oct.	141,561	84,031	65,470	482	1,223	67,175	158,417	25,950	2,711
Nov.	158,417	75,891	63,617	2,848	2,220	68,685	165,623	29,437	2,530
Dec.	165,623	79,116	55,487	6,282	2,127	63,896	180,843	35,466	2,552
Total	.....	971,191	818,850	16,326	42,332	877,508	.....	.....	2,661
Monthly Avg.		80,933	68,238	1,361	3,528	73,126			2,661
1954									
Jan.	180,843	78,561	54,865	3,681	2,146	60,692	198,712	26,378	2,534
Feb.	198,712	68,020	57,781	7,179	1,778	66,738	199,994	28,943	2,429
Mar.	199,994	71,186	66,929	1,703	1,448	70,080	201,100	31,702	2,296
Apr.	201,100	70,255	67,512	977	2,489	70,616	200,740	31,702	2,342
May	200,740	73,645	61,859	670	2,037	64,566	209,828	38,624	2,376
June	209,828	71,466	72,257	2,297	5,685	80,239	201,055	33,100	2,385
July	201,124	70,647	59,197	1,475	13,214	73,886	197,885	38,719	2,279

U. S. Consumption of Slab Zinc

Bureau of Mines

By Industries (Short Tons)

	Galvanizers	Zn-base alloy	Brass products	Rolled zinc	Zinc oxide & other	Total
1947 Total	359,583	215,002	108,591	71,151	26,328	780,675
1948 Total	365,979	232,482	107,422	76,672	24,247	806,802
1949 Total	348,544	197,387	84,257	55,100	17,643	702,931
1950 Total	434,094	281,385	136,451	67,779	27,656	947,365
1951 Total	386,373	266,442	141,456	64,000	28,738	887,009
1952						
May	32,959	17,420	11,025	3,797	2,793	67,994
June	12,215	15,007	10,307	3,593	2,190	43,312
July	12,160	13,422	8,137	3,339	1,817	38,875
August	34,840	17,314	11,782	4,814	1,859	70,609
September	37,394	21,178	13,682	4,478	2,097	78,829
October	40,466	23,286	17,258	4,938	2,937	88,885
November	36,333	21,493	14,776	4,372	3,087	80,061
December	36,717	25,146	16,212	4,699	3,217	85,991
Total	375,563	236,022	155,311	51,508	30,885	849,289
1953						
January	36,974	27,465	16,739	4,593	3,332	89,103
February	34,882	27,092	14,880	3,914	3,330	84,098
March	37,375	30,651	17,494	5,360	3,572	94,452
April	36,181	29,790	17,162	5,109	3,302	91,544
May	34,790	27,398	17,748	5,082	3,408	88,426
June	32,758	27,099	17,564	5,309	3,129	85,859
July	30,535	22,832	12,361	4,053	3,250	73,031
August	33,074	22,740	15,739	4,440	3,107	79,100
September	33,465	21,745	13,374	4,329	3,221	76,134
October	34,354	22,854	13,709	4,077	3,077	78,071
November	29,989	21,408	9,779	3,887	2,482	67,545
December	28,785	24,272	10,758	3,631	2,827	70,273
Total	403,162	305,346	177,301	53,784	38,037	977,636
1954						
January	26,731	21,804	10,266	4,014	3,029	65,844
February	27,243	22,184	8,486	4,035	2,230	64,178
March	31,298	26,549	9,026	4,246	2,520	73,639
April	32,970	24,176	8,181	3,933	2,395	71,655
May	32,935	22,081	8,450	3,848	3,028	70,342
June	34,827	23,534	8,860	4,214	2,880	14,315

Prime Western Zinc Prices

(East St. Louis)

Average Prices, Cents Per Pound

	1951	1952	1953	1954
Jan.	17.50	19.50	12.596	9.76
Feb.	17.50	19.50	11.48	9.375
Mar.	17.50	19.50	11.024	9.66
Apr.	17.50	19.50	11.00	10.25
May	17.50	19.50	11.00	10.29
June	17.50	15.74	11.00	10.96
July	17.50	15.00	11.00	11.00
Aug.	17.50	14.077	11.00	....
Sept.	17.50	14.01	10.18	....
Oct.	19.426	13.306	10.00	....
Nov.	19.50	12.50	10.00	....
Dec.	19.50	12.50	10.00	....
Av.	17.994	16.22	10.857	....

High Grade Zinc Prices

(Delivered)

N. Y. Monthly Averages

(Cents per pound)

	1951	1952	1953	1954
Jan.	18.85	20.85	13.946	11.11
Feb.	18.85	20.85	12.83	10.725
Mar.	18.85	20.85	12.379	11.01
Apr.	18.85	20.85	12.35	11.60
May	18.85	20.85	12.35	11.64
June	18.85	17.09	12.35	12.31
July	18.85	16.35	12.47*	12.35
Aug.	18.85	15.427	12.60*	....
Sept.	18.85	15.36	11.53	....
Oct.	20.776	14.656	11.35	....
Nov.	20.85	13.85	11.35	....
Dec.	20.85	13.85	11.35	....
Av.	19.344	17.57	12.207	....

*East of Continental Divide.

U. K. Zinc Consumption

(British Bureau of Non-Ferrous Metal Statistics)

	1952	1953	1954
Jan.	26,206	21,179	25,615
Feb.	24,454	20,311	25,286
Mar.	24,697	21,662	29,001
Apr	22,072	20,421	26,084
May	21,938	20,105	27,551
June	19,637	21,141	.....
July	18,807	19,226	.....
Aug.	16,511	17,341	.....
Sept.	21,192	26,465	.....
Oct.	22,264	26,865	.....
Nov.	19,570	26,982	.....
Dec.	18,256	26,689	.....
Total	255,657	269,170	.....

Mine Production of Zinc in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern States	Central States	Western States	Total U.S.*
1949				
Total	156,334	78,284	349,264	583,882
1950				
Total	170,726	82,300	365,175	618,207
1951				
Total	188,525	92,457	398,128	679,111
1952				
Total	185,939	94,410	385,652	666,001
1953				
Jan.	16,529	7,931	28,560	53,002
Feb.	15,351	7,360	26,645	49,356
Mar.	16,954	7,529	27,197	51,680
Apr.	16,215	7,459	27,429	51,103
May	14,864	6,851	26,075	47,790
June	15,628	5,015	25,722	46,365
July	15,640	2,771	23,894	42,305
Aug.	14,288	3,104	23,573	40,965
Sept.	14,169	2,841	22,178	39,188
Oct.	14,741	2,821	21,209	38,771
Nov.	14,524	1,990	19,946	36,460
Dec.	14,709	1,646	21,390	37,745
Total	183,612	57,300	293,818	534,730
1954				
Jan.	13,772	4,575	20,505	38,852
Feb.	14,379	4,733	19,010	38,122
Mar.	15,242	5,462	20,548	41,252
Apr.	14,188	4,863	20,894	39,945
May	13,746	5,210	21,075	40,031
June	14,479	5,666	20,395	40,540

* Includes Alaskan output in some months.

Mine Production of Lead in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern States	Central States	Western States	Total U.S.*
1949				
Ttl.	8,719	156,400	238,843	404,032
1950				
Ttl.	8,470	163,489	257,766	429,875
1951				
Ttl.	7,426	152,258	230,723	390,428
1952				
Ttl.	11,252	150,302	228,607	390,161
1953				
Jan.	916	12,394	17,321	30,633
Feb.	905	11,604	16,916	29,427
Mar	1,063	12,417	17,861	31,347
Apr.	1,005	12,943	17,098	31,052
May	911	12,268	15,866	29,045
June	793	11,700	15,856	28,349
July	764	11,277	14,323	26,364
Aug.	596	10,565	14,922	26,083
Sept.	616	10,595	15,263	26,474
Oct.	802	11,065	14,785	26,652
Nov.	813	10,022	13,836	24,671
Dec.	786	11,592	14,729	27,107
Ttl.	9,970	136,650	188,776	335,412
1954				
Jan.	731	10,937	13,027	24,695
Feb.	684	11,709	15,050	27,443
Mar.	785	12,835	15,889	29,539
Apr.	752	11,786	14,306	26,844
May	738	10,970	13,687	25,395
June	782	11,424	13,370	25,576

* Includes Alaskan output in some months.

Mine Production of Gold in United States

(U. S. Bureau of Mines)

(In fine ounces)

	Eastern States	Western States	Alaska*	Total
1949				
Ttl.	2,008	1,726,089	220,903	1,949,000
1950				
Ttl.	2,061	2,108,756	282,866	2,391,683
1951				
Ttl.	2,511	1,749,580	205,452	1,957,543
1952				
Ttl.	1,948	1,650,660	233,428	1,886,036
1953				
July	127	143,296	42,650	186,073
Aug.	97	140,680	39,174	179,951
Sept.	129	147,256	48,544	195,929
Oct.	120	147,753	41,224	189,097
Nov.	144	139,473	30,591	170,208
Dec.	114	137,129	20,000	157,243
Ttl	1,529	1,689,668	273,479	1,964,676
1954				
Jan.	105	137,310	1,585	139,000
Feb.	126	130,410	1,212	131,748
Mar.	158	141,266	7,893	149,317
Apr.	69	134,616	3,538	138,223
May	132	126,844	13,939	140,915
June	147	138,810	38,790	177,747

* Alaska totals based on mint and smelter receipts.

Mine Production of Recoverable Silver in United States

(U. S. Bureau of Mines)

(In Fine Ounces)

	Eastern States	Missouri	Western States	Alaska*	Total
1951 Total	121,485	237,213	39,073,645	27,760	39,463,661
1952 Total	158,004	391,707	38,515,679	31,825	**39,100,923
1953					
June	8,541	32,368	3,051,483	4,655	3,097,047
July	15,363	32,722	2,951,093	5,817	3,004,995
August	10,184	230	3,006,888	5,134	3,022,436
September	15,987	420	3,042,472	6,441	3,065,320
October	12,546	500	3,124,441	5,531	3,143,018
November	18,126	400	2,931,892	4,236	2,954,654
December	10,112	354	3,021,387	3,000	3,034,853
Total	158,707	223,500	36,354,685	39,111	36,776,003
1954					
January	11,662	25,220	2,906,976	256	2,944,074
February	9,333	20,327	2,981,326	178	3,011,603
March	15,643	21,825	3,314,479	1,078	3,353,025
April	11,103	17,795	3,093,436	547	3,124,881
May	11,591	17,997	3,270,529	1,970	3,302,087
June	10,667	18,533	3,101,547	5,275	3,136,022

*Alaska totals based on mint and smelter receipts.
**Includes a total of 3,708 oz. from Illinois.

Production of Primary Aluminum in the U. S.*

(U. S. Bureau of Mines)

(In short tons)

	1947	1948	1949	1950	1951	1952	1953	1954
Jan.	50,045	48,767	54,356	50,023	67,954	76,934	89,895	116,247
Feb.	47,002	45,699	49,749	54,493	62,740	72,374	92,649	110,483
Mar.	43,032	51,874	54,852	58,747	70,022	77,069	104,460	122,339
Apr.	51,007	53,277	54,076	58,024	67,701	76,880	102,071	120,434
May	51,116	55,450	56,909	51,929	67,720	80,803	105,464	125,138
June	46,259	48,557	54,184	60,400	67,454	77,476	104,152	.....
July	47,998	52,937	55,777	63,518	72,698	78,368	109,285	.....
Aug.	47,054	54,953	52,001	63,006	73,816	85,175	110,545	.....
Sept.	43,228	53,255	49,742	54,449	69,429	76,882	109,333	.....
Oct.	43,959	54,526	45,790	62,915	72,647	77,312	108,219	.....
Nov.	43,461	50,174	35,865	62,276	72,246	74,639	105,636	.....
Dec.	47,589	53,474	34,161	65,897	72,454	83,419	110,291	.....
Total	571,750	623,456	603,462	718,622	836,881	937,330	1,252,000	.....

*Based on producers' reports to War Production Board to July, 1946. Thereafter to Bureau of Mines. The monthly figures are preliminary in nature and will not add to the totals derived from the Bureau's annual industry canvass.

U. S. Silver Production*

(A.B.M.S.)

(In thousands of ounces; commercial bars, 0.999 fine, and other refined forms)

	Dom.†	For.	Total
1949 Total	34,559	28,226	62,785
1950 Total	42,068	37,656	79,724
1951 Total	39,967	33,837	73,804
1952			
Total	40,245	36,653	76,898
1953			
January ...	3,362	3,400	6,762
February ..	3,112	2,640	5,752
March	3,175	3,471	6,646
April	3,018	3,193	6,211
May	2,823	3,095	5,918
June	1,909	2,536	4,445
July	2,525	2,533	5,058
August	2,652	4,334	6,986
September .	2,301	2,613	4,914
October ...	3,558	3,431	6,989
November .	2,551	4,707	7,218
December .	3,751	1,811	5,562
Total	34,697	37,764	72,461
1954			
January ...	3,372	2,674	6,046
February ..	3,163	3,729	6,957
March	3,775	3,729	7,504
April	3,643	3,708	7,351
May	3,229	3,335	6,564
June	3,609	3,212	6,821

* The separation between silver of foreign and domestic origin on the basis of refined bars and other refined forms is only approximate.
† Includes purchases of crude silver by the U. S. Mint.

Average Silver Prices

(Cents per fine ounce)

	1951	1952	1953	1954
Jan.	88.71	88.00	84.44	85.25
Feb.	90.16	88.00	85.25	85.25
Mar.	90.16	88.00	85.25	85.25
Apr.	90.16	88.00	85.25	85.25
May	90.16	85.405	85.25	85.25
June	88.553	82.75	85.25	85.25
July	90.16	82.886	85.25	85.25
Aug.	90.16	83.25	85.25	....
Sept.	90.16	83.25	85.25	....
Oct.	88.14	83.25	85.25	....
Nov.	88.00	83.25	85.25	....
Dec.	88.00	83.25	85.25	....
Av.	89.377	84.94	85.183	....

Note — The averages are based on the price of refined bullion imported on or after August 31, 1942.

U. S. Copper Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1954		
	Feb.	Mar.	Apr.
Ore, conc., etc. (cont.)	696	245	81
Refined ingots, bars, etc.†	15,199	12,358	20,142
Canada	...	25	1
Argentina	...	...	876
Brazil	2,551	1,153	3,466
Austria	71	...	298
Belgium	...	...	280
Denmark	...	...	213
France	1,610	1,247	2,495
Germany (W.)	1,458	1,751	2,282
Italy	1,125	2,519	2,272
Netherlands	2,309	1,904	1,602
Norway	504	...	565
Sweden	736	...	336
Switzerland	1,300	560	1,339
U. Kingdom	1,240	392	3,077
India	644	1,595	561
Japan	1,649	1,036	436
Australia	...	112	...
Other countries	2	64	43
Total Exports:			
Crude & refined	15,895	12,603	20,223
Pipes and tubes	55	26	103
Plates & sheets	19	20	14
Rods	62	54	10
Wire, bare	336	295	744
Building wire and cable‡	225	131	347
Weatherproof wire‡	77	38	44
Insulated copper wire, n.e.s.‡	551	686	1,725

† Includes exports of refined copper resulting from scrap that was reprocessed on toll for account of the shipper.

‡ Gross weight; n.e.s. — not elsewhere specified.

U. S. Zinc Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1954		
	Apr.	May	June
Slabs, blocks, etc.	731	862	1,058
Canada	...	5	...
Brazil	246	181	386
Chile	...	3	...
Belgium	...	336	280
France	...	56	...
Germany (W.)	224	...	56
Netherlands	112	...	...
Switzerland	...	280	224
Korea	10	...	...
India	112	...	...
Other countries	27	1	‡112
Total Exports:			
Ore, conc. slab, blocks	731	862	1,058
Scrap: ashes, dross & skimmings	768	531	1,898
Rolled in sheets, plates & strips†	417	326	332
Alloys ex brass and bronze	24	33	72
Die castings	48	64	29

† Includes photoengraving sheets and plates.

‡ To Sweden.

U. S. Copper Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1954		
	Mar.	Apr.	May
Ore, matte & regulus (cont.)	8,849	10,137	10,591
Canada	2,160	2,267	1,709
Mexico	1,431	1,224	1,020
Cuba	1,316	19	2,615
Bolivia	500	96	303
Chile	1,691	...	1,147
Peru	978	786	951
Philippines	39	4,943	1,835
U. of S. Africa	716	705	635
Australia	...	64	339
Other countries	18	33	37
Blister copper (content)	14,160†	21,568	21,085
Canada	...	...	1,507
Mexico	3,323†	1,877	2,169
Chile	9,679	8,152	8,591
N. Rhodesia	...	10,445	4,223
U. of S. Africa	...	1,094	1,664
Turkey	...	...	548
Australia	1,158	...	1,281
Belg. Congo	...	...	1,102
Refined cathodes and shapes	11,253	14,174	19,856
Canada	2,400	4,065	2,534
Mexico	...	...	1,212
Chile	5,779	5,709	14,051
Peru	...	999	737
Belgium	150	...	19
Norway	497	695	500
Yugoslavia	100	606	303
Belg. Congo	2,327	2,100	500
Total Imports:			
Crude & refined	34,262†	45,879	51,532
In rolls, sheets or rods	325	551	435
Old and scrap (content)	280	507	394
Brass scrap & old (cu. cont.)	239	316	199

† Revised.

U. S. Lead Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1954		
	Feb.	Mar.	Apr.
Lead ore, concentrates, matte & base bullion (content)	...	2	84
Canada	...	2	..
Japan	...	...	84
Pigs and bars	49	41	56
Canada	1	...	...
Cuba	3	...	5
Brazil	...	30	4
Chile	...	...	3
Colombia	...	...	3
Venezuela	...	...	3
Philippines	23	...	...
Guatemala	...	5	28
Other countries	22	6	10
Total Exports:			
Ore, base bullion, refined	49	43	140
Sheets & pipes	31	8	42
Typemetal	11	11	72
Antimonial	23	3	7
Scrap	330	816	255

Comparative Metal Prices

	1939 Av.	OPA Nov. 1946	1954 Aug. 17
Copper, Domestic (Electro, Del. Valley)	11.20	14.375	30.00
Lead (N. Y.)	5.05	8.25	14.00
P. W. Zinc (E. St. Louis, f. o. b.)	5.05	9.25	11.00
New York, del.	...	...	11.50
Tin, Spot—Straits, N. Y.	...	...	96.62½
Aluminum Ingot 99%+	20.00	15.00	22.20
Antimony (R.M.M. brand, f. o. b. Laredo)	12.36	14.50	28.50

U. S. Lead Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1954		
	Mar.	Apr.	May
Ore, matte, etc. (content)	13,104	11,821	13,165
Canada	4,254	2,472	2,850
Mexico	220	173	102
Guatemala	198	156	189
Honduras	46	244	86
Bolivia	2,020	775	680
Peru	1,832	3,429	3,834
Greece	436	...	...
U. of S. Africa	3,866	3,078	3,392
Philippines	232	208	147
Australia	...	1,194	1,881
Other countries	...	92	4
Base bullion (content)	8	...	...
Peru	8	...	...
Pigs and bars	21,149†	28,496	29,030
Canada	5,493	5,607	5,470
Mexico	6,417†	9,016	8,252
Peru	882	1,510	2,456
Belgium	...	55	83
Denmark	312	525	473
Spain	...	551	386
U. Kingdom	...	23	...
Yugoslavia	5,172	...	3,767
Fr. Morocco	2,313	4,187	2,207
Australia	560	7,003	5,936
Other countries	...	19	...
Total Imports:			
Ore, base bullion, refined	34,261†	40,317	42,195
Lead scrap, dross, etc. (cont.)	124	163	153
Antimonial lead & typemetal	128	227	695
Lead content thereof	103	157	535

† Revised.

U. S. Zinc Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1954		
	Mar.	Apr.	May
Zinc ore (content)	42,362	31,218	32,037
Canada	11,869	11,116	11,358
Mexico	14,661	14,372	12,431
Guatemala	...	...	49
Bolivia	3,494	688	71
Colombia	...	7	...
Chile	...	...	444
Peru	8,218	4,115	6,857
Yugoslavia	2,558	...	...
U. of S. Africa	455	400	438
Australia	...	371	280
Philippines	54	31	29
Honduras	38	118	80
Other countries	15	...	...
Zinc blocks, pigs, etc.	15,108	14,397	10,139
Canada	12,813	8,862	8,122
Mexico	100	105	..
Peru	1,048	900	709
Belgium	...	...	169
Germany (W.)	...	1,323	..
Italy	375	534	55
Netherlands	...	882	..
Belg. Congo	772	1,791	524
Australia	...	...	560
Total Imports:			
Zinc ore, blocks, pigs	57,470	45,615	42,176
Dross and skim.	60	...	45
Old and worn out	...	170	...

World Production of Copper
(American Bureau of Metal Statistics)
(In Tons of 2,000 Pounds)

	United States (a)	Canada (refined)	Mexico (crude)	Chile (b)	Peru (refined)	Fed. Rep. of Germany (d)	Japan (refined)	Australia (crude)	Union of S. Africa (c)	Rhodesia	Total
1950											
Total	940,249	240,103	61,819	381,432	22,712	214,832	93,408	17,917	36,558	314,589	2,318,320
1951											
Total	964,589	245,122	60,576	396,998	25,495	234,647	100,254	17,330	36,092	349,667	2,455,159
1952											
Total	961,886	197,356	60,874	422,493	22,640	206,747	104,060	21,119	37,459	336,883	4,160,664
1953											
July	79,938	19,997	5,621	29,502	2,359	20,914	7,444	3,711	3,980	34,775	208,241
Aug.	79,376	19,844	5,352	29,652	2,513	18,836	8,681	3,450	3,309	32,207	203,220
Sept.	78,952	16,759	4,974	29,417	2,121	19,654	9,600	3,920	3,506	28,579	197,482
Oct.	83,433	17,650	5,888	20,340	2,140	20,865	9,849	3,479	3,166	35,382	202,192
Nov.	79,934	17,080	5,486	9,669	2,268	20,466	9,581	3,240	2,572	34,262	184,558
Dec.	78,500	18,703	5,075	29,435	2,303	21,429	10,346	3,784	4,041	31,151	204,767
Total	957,318	235,710	63,380	365,734	25,422	233,341	100,381	39,339	38,622	381,031	4,337,556
1954											
Jan.	76,912	14,968	5,543	29,759	1,910	20,687	10,211	1,758	3,816	29,856	193,662
Feb.	68,034	13,955	5,146	28,673	1,465	19,359	10,052	2,483	3,513	25,947	.....
Mar.	73,429	21,075	4,646	21,441	1,599	21,264	11,240	4,412	2,544	38,021	.....
Apr.	70,977	20,379	4,380	21,116	2,412	22,494	11,074	4,446	....	36,250	.....
May	71,571	22,969	4,057	22,782	2,620	21,099	11,030	....	....	32,154	.....
June	74,146	23,344	4,471	....	2,524	.....	.....	....	....	31,982	.....

(a) Blister or converter copper reported by Copper Institute as "min' production or smelter production or shipment and custom intake." Does not include production from scrap nor from smelting or imported ore except that received from Cuba and the Philippines. (b) Reported as bar copper (includes blister, electrolytic and fire-refined). (c) Blister and fire-refined. (d) Refined coopper, both electroolytic and fire-refined includes scrap.

World Production of Refined Lead
(American Bureau of Metal Statistics)
(In Tons of 2,000 Pounds)

	United States	Canada	Mexico	Argentina	Peru	Belgium	France	Fed. Rep. of Germany	Italy	Spain	Japan	Australia (a)	Tunis	Rhodesia	Total
1950															
Total	571,763	170,023	270,951	20,120	34,948	68,446	68,779	136,752	42,780	38,443	17,677	215,228	25,945	15,372	1,713,216
1951															
Total	486,874	162,001	219,352	N.A.	49,044	76,854	53,830	170,766	39,683	45,460	18,515	217,301	25,478	15,646	1,602,601
1952															
Total	532,778	183,389	248,551		53,536	83,139	59,607	152,751	38,504	46,060	20,530	217,293	28,264	14,112	1,709,738
1953															
Aug.	38,022	11,615	19,801	N.A.	5,428	6,164	3,866	12,265	2,359	4,266	2,155	22,312	2,889	1,120	132,262
Sept.	42,154	12,382	18,394	N.A.	5,865	6,424	6,529	12,880	3,197	4,015	2,353	24,817	2,501	1,120	142,631
Oct.	44,741	12,646	19,907	N.A.	5,935	6,457	6,208	14,610	5,072	5,635	2,071	23,754	2,666	1,120	160,445
Nov.	52,562	14,876	17,847	N.A.	5,302	6,648	5,637	15,165	4,608	3,702	1,842	20,095	1,963	1,120	151,367
Dec.	48,687	14,913	19,262	N.A.	5,634	6,900	6,584	15,674	3,635	4,406	2,467	26,464	2,643	1,120	158,389
Total	533,883	165,752	225,075	N.A.	65,228	80,798	60,886	164,076	40,787	53,788	25,513	241,419	30,393	12,891	1,808,496
1954															
Jan.	48,518	13,085	17,374	N.A.	5,292	6,719	6,501	15,207	2,221	4,019	2,820	25,901	2,716	1,120	188,550
Feb.	42,046	12,326	16,052	N.A.	3,620	6,792	6,078	12,996	3,368	4,888	2,874	19,085	2,486	1,002	139,053
Mar	50,808	14,243	22,638	N.A.	5,303	6,416	5,767	14,445	3,963	6,033	3,276	17,244	2,917	1,400	163,582
Apr.	46,730	14,875	20,819	N.A.	5,609	6,064	7,666	13,147	3,255	4,637	....	17,796	1,205	1,848	.....
May	49,319	.....	20,723	N.A.	4,847	....	6,953	13,016	3,668	5,729	....	.....	2,069	1,120	.....
June	42,317	.....	17,651	N.A.	6,332	....	....	.....	....	....	....	.....	....	1,568	.....

(a) Production credited to Australia includes lead refined in England from Australian base bullion. N.A.—Not available.

World Production of Slab Zinc
(American Bureau of Metal Statistics)
(In Tons of 2,000 Pounds)

	United States (a)	Canada (b) (c)	Mexico	Belgium	France (a)	Fed. Rep. of Germany	Great Britain	Italy	Netherlands	Norway	Spain	Japan (a)	Australia (b)	Rhodesia (b)	Total (d)
1950															
Total	910,363	204,453	54,089	195,466	78,849	135,353	78,725	41,929	21,342	47,788	23,406	54,021	94,595	25,542	1,965,526
1951															
Total	931,833	218,548	57,990	220,479	82,184	155,024	78,101	52,058	24,924	44,971	23,444	62,109	88,103	25,301	2,065,216
1952															
Total	961,430	223,140	61,456	205,909	88,255	162,272	76,981	60,438	28,555	43,061	23,329	77,203	97,931	25,637	2,141,088
1953															
Aug.	83,241	21,703	5,096	16,135	5,295	13,783	5,947	6,444	2,235	3,784	1,889	7,803	8,292	2,520	184,167
Sept.	81,211	21,157	4,975	16,248	6,497	13,821	7,355	5,941	2,178	4,506	1,965	7,417	8,164	2,464	183,899
Oct.	84,031	21,880	5,077	16,584	7,275	14,484	5,808	5,784	2,305	4,469	2,256	7,528	9,545	2,436	191,766
Nov.	75,891	21,051	4,931	17,183	7,460	14,392	8,211	5,446	2,276	2,916	2,259	6,943	9,471	2,576	181,006
Dec.	79,116	21,899	5,170	18,218	9,424	15,098	7,623	5,035	2,286	2,852	2,324	8,176	9,841	2,668	192,215
Total	971,191	247,710	59,589	212,001	89,218	163,430	81,436	65,661	27,711	42,566	25,276	86,833	101,000	28,369	2,227,849
1954															
Jan.	78,561	17,156	5,151	19,032	10,081	15,453	7,144	5,358	1,958	3,670	2,261	8,383	9,482	2,520	188,550
Feb.	68,020	15,199	4,710	18,963	8,988	13,872	6,676	4,674	2,114	3,629	1,938	7,711	8,961	2,380	170,123
Mar.	71,168	16,550	5,258	19,213	10,642	15,420	9,119	5,503	2,474	4,522	2,137	9,588	10,012	2,520	186,920
Apr.	70,258	16,250	4,798	19,262	10,413	15,287	6,808	5,832	2,452	4,102	1,921	....	9,736	2,520	.....
May	73,654	16,530	5,090	.....	10,485	15,859	7,253	5,992	2,562	4,153	1,990	....	10,031	2,576	.....
June	71,466	17,017	4,826	.....	.....	.....	9,365	....	....	4,042	....	....	.....	2,604	.....

(a) Partially electrolytic. (b) Entirely electrolytic. (c) Includes production from foreign ores. (d) The above totals oomit production in Russia, Czechoslovakia (in any), Poland, Yugoslavia and South America.

U. K. Virgin Copper Stocks

British Bureau of Non-Ferrous Metal Statistics

(In long tons)

At start of:	1952	1953	1954
Jan.	113,359	131,968	55,344
Feb.	106,890	135,221	60,402
Mar.	103,123	146,911	60,084
Apr.	103,521	149,177	47,258
May	107,906	165,385	60,118
June	114,119	182,500	65,314
July	106,809	185,946	.....
Aug.	107,619	198,609	.....
Sept.	121,152	27,422	.....
Oct.	121,649	31,850	.....
Nov.	119,052	36,824	.....
Dec.	126,394	50,407	.....

U. K. Refined Lead Stocks

British Bureau of Non-Ferrous Metal Statistics

(In long tons)

At start of:	1952	1953	1954
Jan.	77,167	23,090	26,887
Feb.	89,831	27,486	32,653
Mar.	104,206	16,518	30,697
Apr.	110,598	13,781	28,312
May	116,249	17,144	30,005
June	120,261	29,007	29,793
July	121,576	26,868	.....
Aug.	116,283	25,820	.....
Sept.	116,480	28,290	.....
Oct.	109,323	22,886	.....
Nov.	107,160	29,279	.....
Dec.	88,514	29,174	.....

U. K. Stocks of Zinc

British Bureau of Non-Ferrous Metal Statistics

(In tons of 2,240 lbs.)

	Virgin Zinc		Zinc. Conc.	
At start of:	1953	1954	1953	1954
Jan.	166,050	27,652	52,422	45,731
Feb	16,545	35,411	61,346	42,581
Mar.	20,401	37,646	64,625	33,912
Apr.	23,783	40,710	56,489	26,076
May	30,821	38,953	58,815	32,517
June	34,078	38,409	56,514	33,801
July	31,661	.....	55,218	.....
Aug.	34,609	.....	54,467	.....
Sept.	33,348	.....	55,702	.....
Oct.	27,981	.....	49,636	.....
Nov.	24,731	.....	46,173	.....
Dec.	22,462	.....	45,094	.....

U. K. Copper Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1954		
	Apr.	May	June
(Gross Weight)			
Copper and copper alloys	33,514	35,276	40,372
Copper unwrought:			
Electrolytic	22,411	18,626	25,104
Other refined	829	3,371	1,827
Blister or rough	10,264	13,229	13,418
Rods, sections, etc., and wire of brass and other alloys of copper	5	3	15
Other	5	47	8
U. of S. Africa	400	30	200
N. Rhodesia	20,833	19,802	23,494
Canada	6,242	5,749	6,569
Belgium	1,671	1,250	1,500
Germany (W.)	1,764	881	625
Sweden	...	...	2
United States	1,097	3,389	2,141
Chile	500	4,050	4,924
Other countries	1,007	125	917
Total	33,514	35,276	40,372

Copper Consumption in United Kingdom

British Bureau of Non-Ferrous Metal Statistics

(In tons of 2,240 pounds)

	Unalloyed	Brass, etc	Sulphate	Total	Virgin	Scrap
1949 Total	305,614	180,227	10,879	496,720	318,736	177,984
1950 Total	303,833	204,427	13,738	521,998	333,700	188,298
1951 Total	300,665	243,152	11,041	554,853	330,361	224,487
1952 Total	313,374	243,836	14,629	571,839	347,646	224,193
1953						
April	19,226	14,393	1,140	34,759	16,108	18,651
May	17,727	13,951	1,211	32,889	14,779	18,100
June	16,483	14,856	1,027	32,366	15,416	16,950
July	16,187	13,788	898	30,873	14,698	16,175
August	16,097	11,109	463	27,669	22,973	4,696
September	20,947	17,765	737	39,449	29,437	10,012
October	23,618	19,323	801	43,742	32,615	11,127
November	22,285	19,148	784	42,217	31,118	11,099
December	22,952	18,502	779	42,233	32,570	9,663
Total	242,460	192,337	11,206	446,003	321,054	124,949
1954						
January	23,421	18,520	961	42,902	35,344	7,558
February	22,304	19,322	1,041	42,667	31,951	10,716
March	26,049	21,361	1,197	48,607	37,382	11,225
April	22,828	18,542	1,110	42,480	30,196	12,284
May	25,262	20,826	1,210	47,298	36,238	11,060

U. K. Zinc Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1954		
	Mar.	Apr.	May
(Gross Weight)			
Zinc ore and conc.	13,048	17,794	14,216
Australia	8,436	14,893	5,126
Other countries	4,612	2,901	9,090
Zinc conc.†	2,253	13,907	...
Australia	309	11,706	...
Burma	1,944	2,201	...
Zinc and zinc alloys	15,260	15,008	13,327
Zinc or spelter, unwrought, in ingots, blocks, bars, slabs and cakes	15,197	14,968	13,277
Other	63	40	50
N. Rhodesia	722	1,019	906
Australia	1,501	1,500	800
Canada	3,796	3,616	6,237
Belgium	2,155	2,675	2,799
Germany (W.)	1	...	...
Netherlands	250	45	631
Norway	532	300	300
United States	5,601	4,678	1,302
Other countries	702	1,175	352
Total	15,260	15,008	13,327

† British Bureau of Non-Ferrous Metal Statistics. The estimated zinc content is not the content of the gross weights as officially reported for any comparable period.

Zinc Imports and Exports by Principal Countries

(A.B.M.S.)

Reported in slabs, blocks, etc.: metric tons except where otherwise noted.

	1954		
	Mar.	Apr.	May
IMPORTS			
U .S. (s.t.)	15,108	14,397	10,139
Canada (s.t.)	1	...	...
Belgium	356	407	.
Denmark	611	793	797
France	2,242	604	1,338
Germany†	5,647	4,213	...
Italy	332	214	...
Netherlands	1,572	775	...
Sweden	983	2,311	2,308
Switzerland†	1,674	1,865	1,129
U. K. (l.t.)	15,260	15,008	13,327
India (l.t.)	2,527	2,532	2,279
EXPORTS			
U. S. (s.t.)	5,375	731	862
Canada (s.t.)	18,199	17,926	13,926
Belgium	13,027	10,169	...
Denmark	49	35	128
France	112	106	120
Germany†	2,543	798	...
Italy	1,154	1,200	...
Netherlands	2,020	647	...
Norway	2,443	2,085	...
Switzerland†	377	599	464
U. K. (l.t.)‡	347	320	326
N. Rhodesia (l.t.)	2,716	2,239	2,769
Australia (l.t.)	4,462	...	...
Belgian Congo	2,592	...	...

† Includes scrap.
‡ Includes manufactures.

United Kingdom Tin Statistics

(British Bureau of Non-Ferrous Metal Statistics)

	TIN CONTENT OF TIN IN ORE				TIN METAL				
	Imports	Production*	Consumption**	Stock at end of period*	Imports	Production*	Consumption	Exports & Re-exports	Stock at end of period
1952									
Year	28,836	954	29,350	2,364	2,885	29,521	22,555	21,721	4,225
1953									
May	3,598	95	2,450	4,351	86	2,410	1,351	1,152	3,645
June	2,440	136	3,100	3,651	10	2,895	1,519	1,332	3,511
July	2,891	85	3,300	3,328	22	3,289	1,328	1,730	3,749
August	2,945	44	2,650	3,782	20	2,611	1,177	2,195	3,511
September	2,720	98	3,100	3,388	7	2,893	1,820	2,195	3,269
October	2,151	99	2,850	2,769	35	2,667	1,680	1,379	3,157
November	1,812	80	2,550	2,228	50	2,521	1,541	926	3,031
December	2,639	83	2,350	2,450	25	2,249	1,768	823	3,085
Year	28,902	1,103	29,900	2,450	1,038	28,860	18,634	14,450	3,085
1954									
January	1,738	75	2,800	1,444	10	2,718	1,663	652	3,530

*As reported by International Tin Study Group. Production of Tin Metal includes production from imported scrap and residues refined on toll. Stocks exclude strategic stock but include official warehouse stocks. **Own estimates.

Canada's Copper Output

(Dominion Bureau of Statistics)

(Refined Copper)
(In Tons)

	1951	1952	1953	1954
Jan.	20,870	20,364	21,830	15,001
Feb.	18,342	18,901	21,075	13,954
Mar.	20,564	20,480	22,432	21,075
Apr.	20,347	20,363	21,747	20,412
May	22,731	20,548	20,179	23,012
June	21,315	20,274	18,384	.....
July	20,142	14,196	19,996	.....
Aug.	21,740	9,396	19,886	.....
Sept.	18,624	10,323	16,777	.....
Oct.	21,260	12,761	17,675	.....
Nov.	19,195	11,282	17,101	.....
Dec.	20,336	17,432	18,703	.....
Year	245,466	196,320	235,787	.....

Canada's Copper Exports

(Dominion Bureau of Statistics)

(Ingots, bars, slabs and billets)
(In Tons)

	1951	1952	1953	1954
Jan.	8,081	9,237	7,668	9,081
Feb.	6,600	4,947	16,411	8,385
Mar.	7,388	11,104	10,578	11,671
Apr.	12,336	10,948	11,153	11,218
May	6,940	11,355	14,726	18,407
June	8,115	8,178	15,053	.....
July	9,160	7,815	13,939	.....
Aug.	6,503	13,739	7,272	.....
Sept.	8,010	10,908	8,139	.....
Oct.	6,968	11,040	8,957	.....
Nov.	3,387	10,004	9,062	.....
Dec.	13,343	4,500	9,036	.....
Year	101,831	113,675	131,994	.....

Canada's Lead Output

(Dominion Bureau of Statistics)

(Recoverable Lead)*
(In Tons)

	1951	1952	1953	1954
Jan.	16,099	15,271	19,502	17,716
Feb.	12,001	11,072	16,888	16,863
Mar.	12,632	15,522	14,183	17,104
Apr.	10,063	14,547	18,640	19,452
May	11,126	13,770	16,120	19,953
June	13,811	11,172	15,302	.....
July	11,017	11,460	11,969	.....
Aug.	13,797	13,605	13,864	.....
Sept.	11,899	14,488	14,335	.....
Oct.	15,052	16,641	16,327	.....
Nov.	14,785	12,884	19,433	.....
Dec.	15,562	18,406	19,273	.....
Year	158,231	168,842	195,836	.....

* New base bullion from Canadian ores plus recoverable lead in ores or concentrates shipped for export.

Canada's Lead Exports

(Dominion Bureau of Statistics)

(In Pigs)
(In Tons)

	1951	1952	1953	1954
Jan.	10,081	8,136	11,212	6,170
Feb.	6,527	9,702	8,710	7,560
Mar.	10,873	10,851	14,943	11,092
Apr.	8,537	10,450	14,765	9,606
May	14,813	11,020	7,039	11,483
June	5,756	10,466	13,434	....
July	5,795	10,249	1,537	....
Aug.	4,894	10,642	8,869	....
Sept.	6,944	14,121	3,903	....
Oct.	8,660	13,193	7,532	....
Nov.	12,929	12,703	6,581	....
Dec.	9,927	8,208	4,354	....
Year	105,736	129,741	102,879	.....

Canada's Zinc Output

(Dominion Bureau of Statistics)

(Refined Zinc)
(In Tons)

	1951	1952	1953	1954
Jan.	18,244	19,242	18,370	17,155
Feb.	16,710	17,411	18,677	15,199
Mar.	18,138	18,953	20,693	16,550
Apr.	17,484	19,415	20,003	16,249
May	18,116	18,786	20,090	16,530
June	18,222	18,728	20,589	.....
July	18,232	19,411	21,595	.....
Aug.	18,352	18,924	21,703	.....
Sept.	17,956	18,230	21,157	.....
Oct.	17,786	19,754	21,888	.....
Nov.	18,683	16,114	21,051	.....
Dec.	20,271	18,232	21,899	.....
Year	219,194	222,200	247,707	.....

Canada's Zinc Exports

(Dominion Bureau of Statistics)

(Slabs in Tons)

	1951	1952	1953	1954
Jan.	13,277	9,209	17,478	16,625
Feb.	4,602	17,639	13,580	11,328
Mar.	12,185	21,839	18,307	18,199
Apr.	14,014	18,205	17,068	17,926
May	13,776	12,514	15,595	13,926
June	14,337	14,393	14,919	.....
July	13,597	12,800	10,068	.....
Aug.	11,669	10,040	8,594	.....
Sept.	10,435	12,594	9,423	.....
Oct.	16,370	11,454	11,862	.....
Nov.	12,371	14,135	10,685	.....
Dec.	12,500	12,042	10,809	.....
Year	146,133	166,864	158,388	.....

Canada's Silver Exports

(Dominion Bureau of Statistics)

(In ores and concentrates)
(Fine Ounces)

	1952	1953	1954
Jan.	172,826	522,073	547,951
Feb.	144,635	218,421	567,225
Mar.	154,163	263,650	849,502
Apr.	280,130	311,141	572,059
May	222,133	419,569	660,724
June	273,447	323,913	.....
July	380,190	614,320	.....
Aug.	277,597	533,155	.....
Sept.	209,566	527,771	.....
Oct.	928,483	1,015,012	.....
Nov.	353,841	463,667	.....
Dec.	149,437	473,826	.....
Year	3,546,448	5,686,518	.....

Canada's Silver Output

(Dominion Bureau of Statistics)

(In Ounces)

	1952	1953	1954
Jan.	1,803,848	2,459,531	2,553,293
Feb.	2,022,126	2,255,113	2,050,440
Mar.	2,085,986	2,458,022	2,314,392
Apr.	2,521,864	3,076,852	2,706,326
May	2,274,279	2,520,180	2,513,856
June	1,907,137	2,538,663	.....
July	1,831,089	2,353,542	.....
Aug.	2,214,798	2,029,346	.....
Sept.	1,817,435	2,067,294	.....
Oct.	1,857,118	2,097,630	.....
Nov.	2,421,617	2,207,170	.....
Dec.	2,464,930	2,361,452	.....
Year	25,222,227	28,424,795	.....

Canada's Nickel Output

(Dominion Bureau of Statistics)

(In Tons)

	1951	1952	1953	1954
Jan.	10,993	11,813	12,446	12,670
Feb.	9,702	10,719	10,612	11,795
Mar.	11,676	12,381	12,218	13,502
Apr.	10,603	12,318	11,791	12,931
May	12,528	12,413	11,560	13,364
June	11,889	12,563	11,647	.....
July	11,828	10,426	11,751	.....
Aug.	12,304	11,975	11,681	.....
Sept.	11,682	10,982	11,981	.....
Oct.	11,758	11,773	12,419	.....
Nov.	11,570	11,381	12,714	.....
Dec.	11,370	11,815	11,996	.....
Year	137,903	140,559	143,016	.....

Canadian Copper Exports

(Dominion Bureau of Statistics)
(A.B.M.S.)

(In tons of 2,000 lbs.)

	1954		
	Mar.	Apr.	May
Ore, matte, regulus, etc. (content)	4,022	2,883	3,565
United States	2,968	2,061	2,371
Germany (W.)	...	...	379
Norway	931	729	724
U. Kingdom	123	93	91
Ingots, bars, billets	11,671	11,218	18,407
United States	3,913	4,555	5,300
Brazil	413	850	671
France	711	392	662
Germany (W.)	34	...	95
U. Kingdom	6,600	5,421	11,679
Total Exports:			
Crude & refined	15,693	14,101	21,972
Old and scrap	510	595	1,086
Rods, strips, sheet and tubing	197	533	739

Canadian Lead Exports

(Dominion Bureau of Statistics)
(A.B.M.S.)

(In tons of 2,000 lbs.)

	1954		
	Mar.	Apr.	May
Ore (lead content)	3,057	3,464	5,036
United States	3,057	3,464	4,247
Germany	...	...	789
Refined lead	11,091	9,606	11,483
United States	6,403	5,727	5,525
Cuba	...	...	1
Brazil	193	127	85
U. Kingdom	4,032	3,472	5,740
Japan	463	280	131
Other countries	...	...	1
Total Exports:			
Ore & refined	14,148	13,070	16,519
Pipe & tubing	1	3	6
Lead scrap	...	...	95

Canadian Zinc Exports

(Dominion Bureau of Statistics)
(A.B.M.S.)

(In tons of 2,000 lbs.)

	1954		
	Feb.	Mar.	Apr.
Ore (zinc content)	7,663	11,838	11,188
United States	7,663	11,838	11,188
Zinc (spelter)	11,328	18,199	17,926
United States	6,534	11,980	9,544
Brazil	152	...	...
U. Kingdom	4,553	6,218	8,290
Korea	89	..	92
Other countries	...	1	...
Total Exports:			
Ore & spelter	18,991	30,037	29,114
Zinc scrap, dross, ashes	82	66	157
United States	...	51	...
Belgium	...	...	117
W. Germany	82	...	14
India	...	15	26

Copper Imports and Exports by Principal Countries

(A.B.M.S.)

Reported in ingots, slabs, etc.; metric tons except where otherwise noted.

IMPORTS

	1954		
	Mar.	Apr.	May
U. S. (blist., s.t.)	14,160	21,568	21,085
(ref., s.t.)	11,253	14,174	19,856
Belgium†	23,560	16,905	...
Denmark	16	165	424
France (crude)	922	813	813
(refined)	9,237	11,332	8,416
Italy	11,027	9,221	...
Germany	11,829	12,769	...
Netherlands	2,682	913	...
Norway	185	300	...
Sweden	5,734	5,585	6,144
Switzerland	1,905	1,505	1,946
U. K. (l.t.)	29,170	33,514	35,276
India (ref., l.t.)	600	674	2,726

EXPORTS

U. S. (ref., s.t.)	12,358	20,142	22,686
Canada (ref.,s.t.)	11,671	11,218	18,407
Belgium†	13,433	13,358	...
Denmark	20	...	...
Finland‡	262	50	238
Germany	3,685	3,964	...
Norway	1,085	1,263	...
Sweden	1,053	1,697	2,401
U. K. (l.t.)	2,226	2,146	3,348
Belg. Congo*	18,972	17,896	...
N. Rhodesia (ref. & blist., l.t.)	24,400	39,511	26,666

† Includes copper alloys.
‡ Includes old.
* Copper wire bars and ingot bars 99% and copper ingots 97%.

French Zinc Imports

(A.B.M.S.)

(In metric tons)

	1954		
	Apr.	May	June
Ore (gross weight)	18,271	28,226	11,402
Peru	...	2,500	...
Belgium	230	2,003	1,021
Germany (W.)	775	...	...
Italy	2,149	1,857	1,051
Norway	484	...	...
Spain	3,659	3,921	2,678
Algeria	1,040	2,215	2,856
Fr. Morocco	9,434	10,918	508
Tunisia	500	...	1,214
Australia	...	4,812	2,074
Slabs, bars, blocks, etc.	604	1,338	1,779
Belgium	544	803	1,683
Germany (W)	...	25	...
Italy	50	475	70
Norway	...	...	19
U. Kingdom	...	...	1
Algeria	10	35	6

U. K. Copper Exports

(British Bureau of Non-Ferrous Metal Statistics)
(In tons of 2,240 lbs.)

	1954		
	Apr.	May	June
(Gross Weight)			
Copper unwrought, ingots, blocks, slabs, bars, etc.	2,146	3,348	2,318
Plates, sheets, rods, etc.	2,201	1,251	1,808
Wire (including uninsulated electric wire)	297	306	397
Tubes	383	517	431
Other copper, worked (incl. pipe fittings)	23	66	29
Total	5,050	5,488	4,983

French Copper Imports

(A.B.M.S.)

(In metric tons)

	1954		
	Apr.	May	June
Crude copper for refining (blister, black and cement)	813	813	1,051
Belg. Congo	813	813	51
U. of S. Africa	...	...	1,000
Refined	11,332	8,416	9,166
United States	1,980	1,958	3,028
Canada	645	355	600
Chile	100	...	...
Peru	481	635	263
Belgium	2,767	2,888	1,701
Germany (W.)	57	10	51
Norway	...	27	175
Sweden	...	9	2
U. Kingdom	468	287	194
Belg. Congo	4,316	1,551	1,637
Other Br. Africa (East Coast)	518	668	1,427
Other countries	...	28	88
Total Imports:			
Crude & refined	12,145	9,229	10,217

French Metal Exports

(A.B.M.S.)

(In metric tons)

	1954		
	Mar.	Apr.	May
Lead:			
Ore (gross weight)	21	17	11
Pig lead:			
Argentiferous	...	3	...
Non-argenti ferous	223	315	4,807
Antimonial lead	23	16	22
Zinc:			
Slabs, bars, blocks, etc.	112	106	120
Copper:			
Crude copper for refining (blister, black and cement)	...	66	...

Nonferrous Castings

MONTHLY SHIPMENTS, BY TYPE OF METAL

(Bureau of Census — Thousands of Pounds)

	Aluminum	Copper	Magnesium	Zinc	Lead Die
1949 Total	304,409	724,053	9,364	377,779	9,101
1950 Total	543,082	1,056,973	15,224	579,332	20,977
1951 Total	515,131	1,197,443	30,825	487,996	25,936
1952					
November	46,483	80,439	2,959	36,765	1,923
December	53,343	90,799	3,110	42,148	1,648
Total	518,979	1,009,910	34,857	408,353	20,941
1953					
January	55,921	85,519	3,112	46,119	1,939
February	54,988	85,674	3,274	46,723	1,645
March	59,208	93,183	3,403	51,540	1,912
April	61,461	94,063	3,332	51,301	1,979
May	57,340	84,550	2,705	44,174	1,792
June	56,492	83,947	3,063	48,806	1,777
July	51,196	69,597	2,287	39,968	1,506
August	50,428	77,652	2,490	37,800	1,806
September	53,306	79,595	2,455	38,611	1,743
October	55,097	83,899	3,024	40,882	1,709
November	51,014	74,782	2,681	37,688	1,405
December	51,579	77,675	2,691	38,661	1,231
Total	658,022	990,496	34,517	521,253	20,444
1954					
January	51,446	71,437	2,451	40,396	1,514
February	51,213	68,849	2,194	37,660	1,303
March	56,184	76,480	2,407	42,991	1,335
April	53,006	72,900	2,068	38,968	1,559
May	47,708	67,805	1,738	36,793	1,529

*Computed on new basis as of October, 1952.

Copper Castings Shipments

BY TYPE OF CASTING

(Bureau of Census) **(Thousands of Pounds)**

	Total	Sand	Permanent Mold	Die	All Other
1949 Total	724,053	654,444	37,311	8,817	23,481
1950 Total	1,015,679	918,883	52,756	13,224	30,816
1951 Total	1,197,443	1,075,437	69,883	12,516	39,607
1952 Total	1,009,910	910,862	63,865	8,259	26,924
1953					
March	93,183	84,022	5,716	902	2,543
April	94,063	85,171	5,463	893	2,536
May	84,550	76,239	4,856	895	2,560
June	83,947	75,625	4,705	872	2,745
July	69,957	63,365	3,927	692	1,973
August	77,652	69,852	4,890	854	2,056
September	79,595	71,184	5,273	840	2,298
October	83,899	74,460	5,775	853	2,811
November	74,782	66,370	5,077	757	2,578
December	77,675	68,821	5,082	818	2,854
Total	990,496	888,369	61,316	10,077	30,734
1954					
January	71,437	63,034	4,618	816	2,969
February	68,849	60,913	4,743	758	2,435
March	76,480	67,952	5,123	875	2,530
April	72,900	65,418	4,732	377	2,373
May	67,805	61,415	3,755	318	2,317

*Computed on new basis as of October, 1952.

Nickel Averages

Electro, cathode sheets, 99.00%, f.o.b. refinery, duty included

(cents per pound)

	1951	1952	1953	1954
Jan.	50.50	56.50	58.62	60.00
Feb.	50.50	56.50	60.00	60.00
Mar.	50.50	56.50	60.00	60.00
Apr.	50.50	56.50	60.00	60.00
May	50.50	56.50	60.00	60.00
June	56.27	56.50	60.00	60.00
July	56.50	56.50	60.00	60.00
Aug.	56.50	56.50	60.00	....
Sept.	56.50	56.50	60.00	....
Oct.	56.50	56.50	60.00	....
Nov.	56.50	56.50	60.00	....
Dec.	56.50	56.50	60.00	....
Av.	53.98	56.50	59.885	....

Platinum Averages

N. Y. MONTHLY QUOTATIONS

(Dollars per Troy Ounce)

	1951	1952	1953	1954
Jan.	91.50	91.50	91.50	91.40
Feb.	91.50	91.50	91.50	91.00
Mar.	91.50	91.50	91.50	87.88
Apr.	91.50	91.50	91.50	85.50
May	91.50	91.50	91.50	85.50
June	91.50	91.50	92.81	85.50
July	91.50	91.50	94.00	85.50
Aug.	91.50	91.50	94.00	....
Sept.	91.50	91.50	92.50	....
Oct.	91.50	91.50	92.50	....
Nov.	91.50	91.50	92.50	....
Dec.	91.50	91.50	92.15	....
Av.	91.50	91.50	92.496	....

Prompt Tin Prices

(Straits, Open Market, N. Y.)

Monthly Average Prices

(cents per pound)

	1951	1952	1953	1954
Jan.	171.74	109.727†	121.50	84.84
Feb.	182.68	121.50†	121.50	85.04
Mar.	146.035†	121.50†	121.415	91.24
Apr.	145.95†	121.50†	101.07	96.238
May	139.954†	121.50†	97.387	93.51
June	118.048†	121.50†	92.933	94.24
July	106.00†	121.50†	81.826	96.55
Aug.	103.00†	121.50†	80.69	....
Sept.	103.00†	121.375	82.275	....
Oct.	103.00†	121.228	80.897	....
Nov.	103.00†	121.25	83.26	....
Dec.	103.00†	121.465	84.693	....
Av.	127.12	(A)	95.787	....

†RFC Prompt Grade A from March 13, 1951.

(A) RFC 1952 average price, 120.519c. Average Open Market Price, last four months of 1952, 121.344c.

Monthly Tin Production at Longhorn Smelter

(From Concentrates)

(In tons of 2,240 pounds)

	1951	1952	1953	1954
Jan.	3,211	1,802	4,000	2,700
Feb.	3,096	1,800	3,400	3,008
Mar.	3,036	1,800	3,850	3,559
Apr.	3,058	1,800	3,750	3,006
May	3,059	1,800	3,100	2,054
June	2,655	NIL	3,000	1,205
July	2,406	NIL	3,000	....
Aug.	2,543	NIL	2,600	....
Sept.	2,155	2,450	2,700	....
Oct.	2,091	3,364	2,751	....
Nov.	1,806	4,020	2,750	....
Dec.	1,805	3,705	2,750	....
Total	30,921	22,541	37,651	....

Quicksilver Averages

N. Y. Monthly Averages

Virgin, Dollars per 76-lb. Flask

	1951	1952	1953	1954
Jan.	199.18	209.19	214.88	189.60
Feb.	218.05	201.74	207.37	190.00
Mar.	216.92	207.74	199.92	201.63
Apr.	217.14	205.08	197.90	221.36
May	214.462	200.81	196.50	251.20
June	211.00	196.38	193.42	273.46
July	207.46	192.154	192.21	287.40
Aug.	199.24	188.115	190.42	.....
Sept.	208.65	190.76	187.04	.....
Oct.	220.02	194.00	184.62	.....
Nov.	217.87	202.64	186.00	.....
Dec.	214.92	215.30	188.38	.....
Av.	212.08	200.50	194.89	.....

Primary Aluminum Output, Shipments and Stocks

(U. S. Department of Interior)

	Stocks beginning of month short tons	Production short tons	Sold or Used Short tons	Sold or Used Value f. o. b. plant	Stocks end of month short tons
1953					
March	10,502	104,460	99,705	38,867,977	15,257
April	15,257	102,071	99,242	38,818,915	18,086
May	18,086	105,464	102,535	40,034,039	21,015
June	21,015	104,152	107,357	41,978,711	17,810
July	17,810	109,285	109,247	43,039,447	17,848
August	17,848	110,545	104,015	41,156,603	24,378
September	24,378	109,333	106,720	42,916,029	26,991
October	26,991	108,219	113,420	45,733,162	21,790
November	21,790	105,636	97,374	39,304,264	30,052
December	30,052	110,291	101,024	40,681,905	39,317
1954					
January	39,319	116,247	112,831	45,540,192	42,735
February	42,735	110,483	94,724	38,110,318	58,494
March	58,494	122,339	117,587	47,220,513	63,246

Aluminum Wrought Products

PRODUCERS' MONTHLY NET SHIPMENTS

(Bureau of Census — Thousands of Pounds)

	Total	Plate, Sheet, & Strip	Rolled Structural Shapes, Rod, Bar & Wire	Extruded Shapes Tube Blooms & Tubing	Powder, Flake, & Paste
1948 Total	1,640,206	1,268,297	182,991	171,964	16,954
1949 Total	1,158,146	790,025	203,650	149,995	14,476
1950 Total	1,713,449	1,163,135	269,780	258,075	22,459
1951 Total	1,756,244	1,073,367	345,163	312,944	24,770
1952 Total	1,924,750	1,085,699	443,546	347,542	47,963
1953					
January	188,445	110,725	35,695	37,916	4,109
February	186,155	109,154	36,492	36,579	3,930
March	214,871	127,083	42,062	41,366	4,360
April	220,025	129,172	46,490	40,697	3,666
May	209,667	123,616	41,725	40,628	3,698
June	205,585	121,219	40,258	41,224	2,884
July	202,796	123,429	37,453	39,273	2,641
August	191,007	117,826	32,180	37,626	3,378
September	184,143	111,807	33,295	35,597	3,444
October	186,056	113,589	29,168	38,720	4,579
November	148,894	89,383	24,041	31,590	3,880
December	149,221	91,162	23,187	30,709	4,163
Total	2,286,865	1,368,165	422,046	451,922	44,732
1954					
January	153,920	84,293	31,600	34,576	3,451
February	145,335	80,505	29,577	31,583	3,664
March	170,010	92,955	32,698	38,928	5,429
April	174,176	96,893	33,637	39,246	4,420
May	168,678	94,886	21,197	40,981	3,514
June	184,154	101,926	31,299	46,195	4,734

Aluminum Castings Shipments

(Bureau of Census)

BY TYPE OF CASTING

(Thousands of Pounds)

	Total	Sand	Permanent Mold	Die	All Other
1949 Total	351,778	122,604	123,523	93,340	7,311
1950 Total	543,082	184,782	181,366	167,201	9,733
1951 Total	515,131	193,378	160,011	151,465	10,277
1952 Total	518,979	194,616	146,883	169,732	7,748
1953					
February	54,988	17,859	16,752	20,129	248
March	59,208	19,047	17,912	21,935	314
April	61,461	20,158	16,628	22,305	370
May	57,340	19,639	16,528	20,858	315
June	56,492	19,349	15,528	21,335	280
July	51,196	16,614	15,692	18,549	341
August	50,428	15,940	16,252	17,837	399
September	53,306	17,826	17,189	17,857	416
October	55,097	17,171	17,030	20,547	349
November	51,014	16,169	15,396	19,012	437
December	51,579	15,265	16,907	18,963	436
Total	658,022	214,553	200,025	239,330	4,114
1954					
January	51,446	14,698	16,615	19,709	424
February	51,213	14,696	17,281	18,754	482
March	56,184	14,468	19,576	21,645	495
April	53,006	14,073	18,091	20,366	476
May	47,708	12,461	16,357	18,368	522

*Computed on new basis as of October, 1952.

Virgin Aluminum

Virgin 99% Delivered

Monthly Average Prices

(Cents per pound)

	1951	1952	1953	1954
Jan.	19.00	19.00	20.173	21.50
Feb.	19.00	19.00	20.50	21.50
Mar.	19.00	19.00	20.50	21.50
Apr.	19.00	19.00	20.50	21.50
May	19.00	19.00	20.50	21.50
June	19.00	19.00	20.50	21.50
July	19.00	19.00	20.962	21.50
Aug.	19.00	19.846	21.50	....
Sept.	19.00	20.00	21.50	....
Oct.	19.00	20.00	21.50	....
Nov.	19.00	20.00	21.50	....
Dec.	19.00	20.00	21.50	....
Av.	19.00	19.404	20.928	....

Magnesium Wrought Products Shipments

(Bureau of Census)

(Thousands of Pounds)

	1951	1952	1953	1954
Jan.	1,522	1,635	1,313	972
Feb.	1,489	1,748	1,454	1,058
Mar.	1,889	1,712	1,601	1,136
Apr.	1,531	1,745	1,708	892
May	1,716	1,804	1,699	1,129
June	1,643	1,428	1,192	1,312
July	1,391	1,390	1,589	....
Aug.	1,497	1,438	1,433	....
Sept.	1,461	1,305	1,254	....
Oct.	1,773	1,408	1,409	....
Nov.	1,645	1,178	1,314	....
Dec.	1,533	1,440	919	....
Total	19,090	18,249	16,885	....
Total	12,810	19,090	18,249	16,885

Cadmium Averages

N. Y. Monthly Averages

Cents per lb. in ton lots

	1951	1952	1953	1954
Jan.	255.00	255.00	193.00	200.00
Feb.	255.00	255.00	200.00	170.00
Mar.	255.00	255.00	200.00	170.00
Apr.	255.00	255.00	200.00	170.00
May	255.00	237.00	200.00	170.00
June	255.00	225.00	200.00	170.00
July	255.00	225.00	200.00	170.00
Aug.	255.00	200.00	200.00	.....
Sept.	255.00	200.00	200.00	.....
Oct.	255.00	200.00	200.00	.....
Nov.	255.00	200.00	200.00	.....
Dec.	255.00	179.81	200.00	.....
Av.	255.00	223.90	199.44	.....

Steel Ingot Production

(American Iron and Steel Institute)

Period	Estimated Production — All Companies: OPEN HEARTH Net tons	OPEN HEARTH Per cent of capacity	BESSEMER Net tons	BESSEMER Per cent of capacity	ELECTRIC Net tons	ELECTRIC Per cent of capacity	TOTAL Net tons	TOTAL Per cent of capacity	Calculated weekly production, all companies (net tons)
1949 Total	70,227,775	82.8	3,946,656	76.0	3,693,922	60.4	77,868,353	81.0	1,492,448
1950 Total	86,262,509	98.7	4,534,558	81.3	6,039,008	86.5	96,836,075	96.9	1,857,232
1951 Total	93,146,625	102.3	4,890,946	87.0	7,096,982	93.9	105,134,553	100.9	2,016,390
1952 Total	82,846,439	87.2	3,523,677	65.5	6,797,923	82.6	93,168,039	85.8	1,782,097
1953									
February	7,939,299	100.8	329,389	92.6	664,091	84.6	8,932,779	99.1	2,233,195
March	9,050,773	103.7	354,710	90.0	762,615	87.7	10,168,098	101.8	2,295,282
April	8,493,909	100.5	334,605	87.7	717,024	85.2	9,545,538	98.7	2,225,067
May	8,925,163	102.3	354,577	90.0	717,340	82.5	9,997,080	100.1	2,256,677
June	8,394,502	99.4	332,060	87.0	677,917	80.5	9,404,479	97.2	2,192,186
July	8,316,342	95.5	324,068	82.4	635,263	73.2	9,275,673	93.1	2,098,569
August	8,463,155	97.0	310,074	78.7	632,351	72.7	9,405,580	94.2	2,123,156
September	8,076,277	95.8	287,638	75.6	519,513	61.9	8,883,428	92.1	2,075,567
October	8,648,428	99.1	225,250	82.6	489,044	56.3	9,462,722	94.7	2,136,055
November	8,002,349	94.7	283,321	74.3	404,382	48.0	8,690,052	89.9	2,025,653
December	7,321,947	84.1	269,813	68.6	354,568	40.9	7,946,328	79.7	1,797,812
Total	100,473,823	97.9	3,855,705	83.2	7,280,191	71.1	111,609,719	94.9	2,140,578
1954									
January	7,256,526	78.3	260,453	64.0	434,507	48.9	7,951,486	75.3	1,794,918
February	6,523,213	77.9	174,523	47.4	385,771	48.1	7,083,237	74.3	1,770,809
March	6,649,667	71.7	207,726	51.1	432,207	48.3	7,289,600	69.0	1,645,508
April	6,365,326	70.9	162,657	41.3	442,954	51.5	6,910,937	68.0	1,624,927
May	6,817,951	73.6	198,063	48.7	456,724	51.4	7,472,738	70.7	1,686,848
June	6,697,000	74.6	208,000	52.8	456,000	53.0	7,361,000	72.0	1,716,000

Blast Furnace Output

American Iron and Steel Institute)

1945	net tons: Pig Iron	Ferro-manganese & Spiegel	Total	% Capacity
Ttl. Yr.	53,454,872	712,210	54,167,082	80.5
1946				
Ttl. Yr.	44,854,801	523,729	45,378,530	67.4
1947				
Ttl. Yr.	58,507,169	702,561	59,209,730	90.1
1948				
Ttl. Yr.	60,135,941	712,899	60,848,840	90.2
1949				
Ttl. Yr.	53,613,779	592,564	54,206,343	76.8
1950				
Ttl. Yr.	64,810,272	673,896	65,484,168	91.5
1951				
Ttl. Yr.	70,487,380	745,381	71,232,761	98.3
1952				
Mar.	6,241,286	58,720	6,300,006	100.8
Apr.	5,185,396	39,458	5,224,854	86.3
May	5,436,144	55,564	5,491,708	87.8
June	1,056,278	12,003	1,068,281	17.6
July	995,957	6,537	1,002,512	16.1
Aug.	5,782,096	48,661	5,830,757	93.3
Sept.	6,095,865	68,500	6,164,365	102.1
Oct.	6,442,024	73,067	6,515,091	104.2
Nov.	6,155,565	71,723	6,227,288	102.9
Dec.	6,436,136	73,400	6,509,536	104.4
Total	61,528,665	629,926	62,158,591	84.2
1953				
Jan.	6,482,081	82,302	6,564,393	97.3
Feb.	5,813,202	68,316	5,881,518	96.6
Mar.	6,611,040	66,321	6,677,361	99.0
Apr.	6,171,939	58,702	6,230,641	95.4
May	6,519,082	68,033	6,587,115	97.7
June	6,297,559	74,972	6,372,531	97.6
July	6,436,345	80,142	6,516,487	96.8
Aug.	6,391,749	79,805	6,471,554	96.0
Sept.	6,132,330	69,689	6,202,019	95.2
Oct.	6,419,752	77,958	6,497,710	96.3
Nov.	5,999,704	62,896	6,062,600	92.8
Dec.	5,712,938	65,902	5,778,840	85.9
Total	74,987,721	855,038	75,842,759	95.5
1954				
Jan.	5,516,689	63,824	5,579,513	80.1
Feb.	4,764,613	45,941	4,810,554	76.5
Mar.	4,907,147	52,156	4,959,303	71.2
Apr.	4,449,289	53,277	4,502,566	66.7
May	4,572,252	52,187	4,624,439	66.4
June	4,683,629	40,521	4,724,150	70.0

Steel Castings Shipments

(Bureau of Census)

	(Short Tons) Total	For Sale	For Own Use
1948	1,760,032	1,335,295	424,737
1949	1,250,460	865,297	385,163
1950	1,461,667	929,192	374,217
1951	2,101,604	1,507,413	594,191
1952			
Mar.	173,694	131,997	41,697
Apr.	175,075	134,325	40,750
May	173,635	132,129	41,506
June	141,628	114,410	27,218
July	119,036	97,633	21,403
Aug.	150,232	113,997	36,235
Sept.	158,392	121,402	36,990
Oct.	165,155	124,629	40,529
Nov.	148,259	110,467	37,792
Dec.	162,237	122,670	39,567
Total	1,925,116	1,476,352	448,767
1953			
Jan.	167,211	126,819	40,392
Feb.	175,675	137,592	38,083
Mar.	182,181	141,873	40,308
Apr.	179,615	140,051	39,564
May	165,649	126,380	39,269
June	164,665	125,984	38,681
July	139,577	105,687	33,890
Aug.	141,340	107,941	33,399
Sept.	135,303	102,880	32,423
Oct.	140,702	106,788	33,914
Nov.	114,088	84,945	29,143
Dec.	123,281	91,017	32,264
Total	1,829,277	1,290,016	431,330
1954			
Jan.	122,758	93,577	29,181
Feb.	116,520	88,699	27,821
Mar.	122,310	92,271	30,039
Apr.	105,788	78,754	27,034
May	94,610	70,596	24,014

GALVANIZED SHEET SHIPMENTS

(American Iron & Steel Institute)

(Net Tons)

	1951	1952	1953	1954
Jan.	180,399	165,196	201,472	169,086
Feb.	146,290	152,761	183,503	167,433
Mar.	172,535	177,674	204,995	180,198
Apr.	174,129	170,583	196,656	203,312
May	177,310	182,978	189,765	201,671
June	176,498	53,947	184,862	200,456
July	161,428	56,254	185,896	.....
Aug.	190,578	177,661	187,741	.....
Sept.	157,170	201,318	194,257	.....
Oct.	160,552	219,883	208,705	.....
Nov.	143,044	194,712	177,391	.....
Dec.	145,971	208,191	175,375	.....
Total	1,984,961	1,961,158	2,290,868	.....

SHIPMENTS of TIN-TERNE PLATE

(American Iron & Steel Institute)

(Net Tons)

	Hot Dipped 1953	Hot Dipped 1954	Electrolytic 1953	Electrolytic 1954
Jan.	121,634	93,776	311,635	317,587
Feb.	105,608	95,386	267,824	297,169
Mar.	130,111	120,471	318,049	354,233
Apr.	122,291	103,910	319,386	340,838
May	122,710	145,783	336,209	461,026
June	127,570	187,508	313,595	502,466
July	102,291	.....	302,235	.....
Aug.	118,884	.....	271,490	.....
Sept.	95,060	.....	244,718	.....
Oct.	98,889	.....	262,548	.....
Nov.	84,242	.....	218,694	.....
Dec.	88,790	.....	177,075	.....
Total	1,318,080	.....	3,343,458	.....

Steel Ingot Operations

(Percentage of Capacity as Reported by (American Iron & Steel Institute)

Week Beginning	1951	1952	1953	1954
Jan. 4	99.1	102.1	98.2	75.4
Jan. 11	99.6	98.7	99.3	74.3
Jan. 18	100.9	99.4	99.7	74.1
Jan. 25	101.3	100.1	99.4	75.6
Feb. 1	96.7	100.6	97.7	74.4
Feb. 8	98.5	100.1	99.7	74.4
Feb. 15	99.5	100.6	99.1	74.6
Feb. 22	99.8	100.9	99.4	73.6
Mar. 1	101.0	101.3	100.3	70.7
Mar. 8	100.1	101.8	101.3	69.3
Mar. 15	101.1	102.4	101.5	67.6
Mar. 22	103.5	102.6	103.1	68.1
Mar. 29	102.4	102.1	97.1	69.1
Apr. 5	102.3	62.3	98.9	68.0
Apr. 12	102.9	97.0	98.8	68.0
Apr. 19	103.3	100.4	101.0	68.6
Apr. 26	104.0	52.1	100.3	68.7
May 3	103.7	83.0	100.2	69.4
May 10	103.9	100.3	100.3	70.9
May 17	103.6	101.3	99.8	71.8
May 24	102.7	102.3	100.3	71.2
May 31	103.2	38.7	99.6	70.2
June 7	103.2	12.5	97.9	73.2
June 14	103.2	11.8	96.8	72.3
June 21	102.8	12.3	96.8	72.1
June 28	100.8	13.3	91.8	65.8
July 5	101.5	14.2	92.8	60.0
July 12	101.9	15.1	94.7	64.3
July 19	101.4	15.3	94.4	65.3
July 26	101.5	42.9	92.6	64.2
Aug. 2	101.1	89.9	94.0	64.0
Aug. 9	101.5	93.3	95.2	63.7
Aug. 16	100.4	97.1	95.9	....
Aug. 23	99.8	98.7	93.4	....
Aug. 30	98.3	98.9	90.5	....
Sept. 6	100.0	100.8	89.2	....
Sept. 13	101.2	102.1	91.4	....
Sept. 20	102.1	104.0	95.1	....
Sept. 27	102.6	105.7	95.3	....
Oct. 4	101.8	106.6	95.2	....
Oct. 11	102.1	105.8	96.3	....
Oct. 18	102.9	106.9	95.0	....
Oct. 25	104.5	107.3	94.6	....
Nov. 1	101.0	105.9	93.0	....
Nov. 8	101.0	106.4	92.3	....
Nov. 15	103.7	106.5	90.7	....
Nov. 22	104.0	106.1	86.8	....
Nov. 29	103.6	105.0	87.5	....
Dec. 6	104.1	106.3	86.7	....
Dec. 13	104.9	107.7	84.3	....
Dec. 20	101.4	102.7	64.1	....
Dec. 27	102.0	107.2	75.7	....

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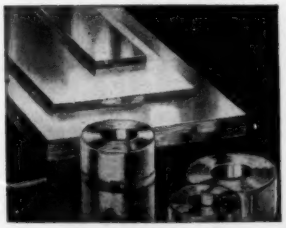

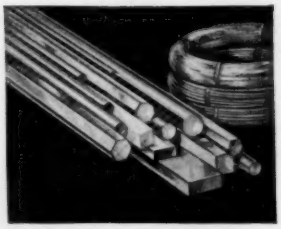

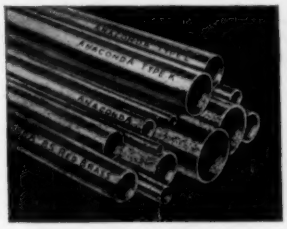

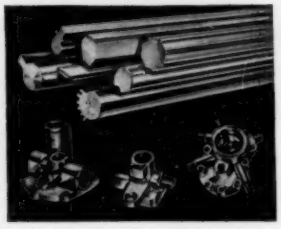

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